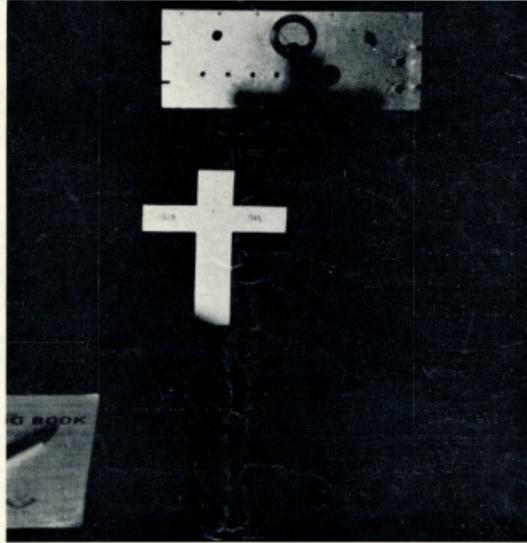


AMATEUR RADIO

AUGUST 1963



Vol. 31, No. 8



REMEMBRANCE DAY CONTEST - - 17th and 18th AUGUST

2/-

HAM RADIO SUPPLIERS

5A MELVILLE STREET, HAWTHORN, VICTORIA

Phone 86-6465

We sell and recommend Leader Test Equipment, Pioneer Stereo Equipment and Speakers, Hitachi Radio Valves and Transistor Radios, Kew Brand Meters, A & R. Transformers and Transistor Power Supplies, Ducon Condensers, Welwyn Resistors, etc.

North Balwyn tram passes corner. Money Orders and Postal Notes payable North Hawthorn P.O. 5/- Packing Charge.

SCOTCH BRAND RECORDING TAPE

Brand New, Bankrupt Stock
on 5" Reels

1275 feet, 42/-; usual price 62/-.
850 feet, 30/-; usual price 42/-.

SAKURA CIRCUIT TESTER

Sensitivity: d.c. 20,000 ohms/volt, a.c. 10,000 ohms/volt. Ranges—d.c. volts: 6, 30, 120, 600, 1,200v.; a.c. volts: 6, 30, 120, 600, 1,200v. D.c. current: 60 μ A, 6 mA, 60 mA, 600 mA. Resistance: 10K, 100K, 1M, 10M ohms. Capacitance: 0.001-0.2 μ F, 0.0001-0.1 μ F. Inductance: 30-3,000H. Decibels: -20 to +17 db. (0 db.—0.775 volt—600 ohms). Dimensions: 4" x 6" x 23". Weight: 13 lbs.

Price £9/10/0 inc. tax.

CO-AXIAL CABLE

50 ohm, UR67, 3/8" diam., in 25 yd. Rolls 30/-; or 1/6 yard.
52 ohm UR43, 3/16" diam., in 12 yd. Rolls 15/-; or 1/6 yard.
71 ohm UR32, 3/16" diam., in 100 yard Rolls £7/10/0.
72 ohm UR70, 3/16" diam., in 27 yd. Rolls 30/-; or 1/6 yard.

TRANSISTOR RADIO BATTERY

9volt, Type 216 (BL-006P). Well known make. 4/9 each. Discount for quantity.

Log Books 5/6, postage 1/- extra

BARGAINS!

Rienartz Coils, RC6 ... 12/6 each
Sato Knobs, black & white, 1/2" shaft, 1/6
Plastic Valve Caps, suit 807, 866, 3/8 ea.
Crystal Earphone, suit Trans. Radio, 6/6
Circuits for CV1935 Transceivers, 10/-
Dial Globes, Madza, 7/6 per box of 10.
Dial Globes, 40 mA ... 1/- ea.
Egg Insulators ceramic, 1 1/2" & 1", 9d ea.
Three-core domestic Cable 2/3 a yard
Hook-up Wire, 10/010, red, black and
Green, 4d, yard, or 200 yd. roll £3.
Earphone Inserts No. 2, actuating dia-
phragm type, ideal as small spkr., 7/6
Pye dble. bulbhead mtg. Coax Con., 2/6
Pye Coax Connectors ... 4/- pair
Crystal Sockets, DC11 ... 2/6 each
Crystal Sockets, FT243 and min., 2/9 ea.
SCR522 28-volt Genemotor power sup.,
20/-, 5/- packing
Low Impedance Headphones, 12/6 pair
Vibrators, Oak/M.S.P. 6 volt, synchronous,
7-pin, AV5211R ... £1
Octal Plug and Socket, American Am-
penol, in metal screw case, 8/6 each
Scope Soldering Irons, to clear 55/-
Complete with transformers £5
Ceramic Variable Condensers, small, 5
to 60 pF, Eddystone ... 28/-
Ceramic 1" Shaft Couplings ... 3/6
Vibrators, 4-pin 6 volt, non-synchronous,
M437 ... 42/-
Vibrators, 4-pin 12 volt, non-synchronous,
M438 ... 42/-
Valve Socket and Shield, 9-pin Mc-
Murdo ... 4/6
Ceramic 7-pin Valve Sockets, 2/6 each
Ceramic 9-pin Valve Sockets, 2/6 each
EF50 Ceramic Socket ... 3/6
EA50 Valve Sockets ... 1/6

BARGAINS!

MR21 10/-
7W7 2/6 10 a £1
12A6 4/- 6a £1
12AH7 5/- 5a £1
12AT7 15/-
12AU7 15/-
12C8 5/-
12H6 3/6
12J5 5/- 5a £1
12S7 10/-
12SA7GT 10/-
12SC7 5/- 5a £1
12SK7 5/- 5a £1
12SQ7GT 22/-
12SR7 5/-
12SR7 5/- 5a £1
14AT7 3/6 7a £1
1625 5/- 5a £1
1629 5/- 5a £1
1631 5/-
1647 3/6 7a £1
1654 11/4
1662 5/- 5a £1
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AUGUST 1963

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FEDERAL COMMENT

★

REMEMBRANCE DAY CONTEST

Once again our most popular Australian Contest is with us and serious contestants are preparing their gear to better their scores of last year. The changes to the Contest are few—however, two alterations agreed at Perth in 1962 have been made by way of amendment to the Rules published last month. The details of these changes are shown elsewhere in this issue.

The two amendments allow any Australian Amateur to obtain a certificate if he be a member of the W.I.A. or not. The other is the inclusion of the A.C.T. as a separate call area for certificate purposes, although, until formed as a Division, the A.C.T. may not win the perpetual State Trophy. Negotiations are also in hand to invite Sir Rohan Delacombe, the new Governor of Victoria, to deliver the opening address prior to the commencement of the Contest.

This year's Contest, like its predecessors, therefore promises to be a "bumper" one. We hope every entrant to the Contest will listen to the opening address, at that time give a little thought to the reason for the Contest, and carry the spirit and intent into the Contest itself—adopt good operating procedures, be unselfish, help your State to win by submitting your log, and most of all, enjoy yourself. Good luck.

NEW COMPONENTS

Every Amateur is interested in new components arriving on the market, or materials which will help improve or simplify his station equipment. One generally "window shops" at the popular radio houses for such items, but how many Amateurs look in other places, such as electrical stores, for new ideas?

We recently saw a new line of high impact plastic conduit and fittings, in a wide range of sizes, which appear to have great promise for Amateur work as well as in their intended use. These components are welded quite readily and easily, and impressed us with their light weight and strength. They would appear to be, size for size, more than competitive with their aluminium counterparts in price and weight.

An immediate idea which came to mind was the use of the conduit for beam elements. With a suitable metallic internal spray coating and the simplicity of welding and working, a very light beam could be built to last for many years and be completely waterproof into the bargain. Junction boxes and other fittings would no doubt have many other uses in the Amateur field.

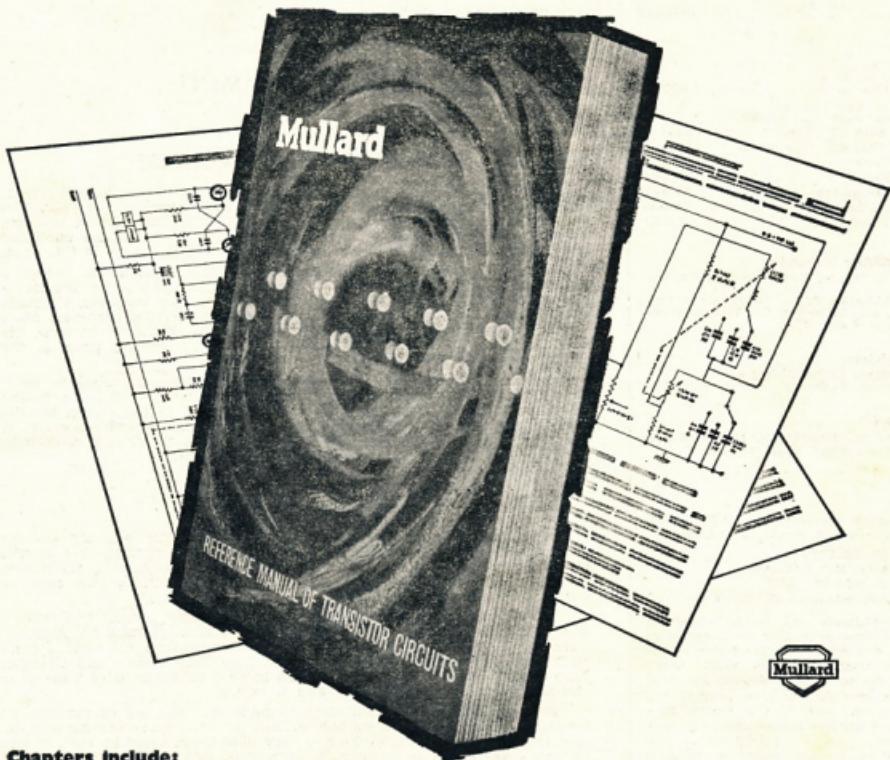
The average Amateur is an ingenious chappie and with some improvisation we foresee these materials being widely used in the near future. Maybe you have already seen and tried some of these items—if so, why not tell your fellow Amateurs about it—use this journal to disseminate your applications by writing an article which will be gratefully accepted.

FEDERAL EXECUTIVE, W.I.A.

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High Frequency Filter Type S.S.B. Transmitter

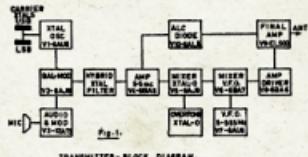
ARIE BLES.* VK2AVA

THE unit to be described is a 150 to 200 watt peak input s.s.b. transmitter, in principle capable of operation on any of the Amateur bands from 15 to 160 metres. It has been built in one version as a three-band 80-40-20 metres bandswitching unit, not larger than 9 by 12 inches chassis size.

The basic circuit diagram is presented herewith and possible modifications will be indicated. The presentation is not meant to be copied literally, but rather as an example of what can be assembled of locally available components, with a heart of the set a high frequency crystal filter composed of surplus type FT243 crystals at approximately 5,500 Kc. frequency.

PRINCIPLE OF OPERATION

Fig. 1 shows in simplified form the layout used. In a balanced modulator V2, r.f. carrier energy from the carrier oscillator V1 is modulated by audio frequencies from V3. The carrier is suppressed to a large degree and the residual carrier with two sidebands are fed through a four-crystal hybrid filter. Only one sideband will be passed, which is amplified in a stage of straight amplification in V4, and mixed in the following mixer/frequency converter stage V5 with fixed frequencies, derived from a third overtone crystal oscillator. The results are s.s.b. on still fixed frequencies, approximately 5,000 Kc. or so higher in frequencies than the desired Amateur bands.



Balanced modulator, filter and mixing frequency layouts have been described in earlier issues of "A.R." (Sept '62, Feb. '63, and April '63, respectively). The advantage of this system, first used by Hallicrafters, is reasonable freedom from images and other undesired mixing products, and the need of only one common v.f.o. frequency range to cover all Amateur bands, provided the intermediate mixing frequencies have been properly chosen (see Table 1).

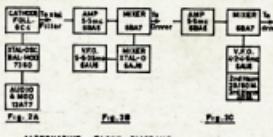
The next step is to mix these intermediate frequency s.s.b. signals with v.f.o. voltage from V7 in the mixer V6, amplify the proper output in the corresponding Amateur band through V8 to drive the class AB1 final V9, the output of which is coupled to the antenna. A small voltage from that output is rectified in diode V10 and fed back to V4 to provide a.l.c. (automatic level control), just as a.v.c. is achieved in a receiver.

SUGGESTED MODIFICATIONS

There are modifications possible, some of which are schematically indicated in Fig. 2. Those that prefer the ultimate, at a price, in balanced modulators, the 7380 tube, could combine the crystal oscillator in the same envelope as the balanced modulator and also include a triode cathode follower stage to properly match the fairly low impedance of the crystal filter (see Fig. 2a). Another and even better method of frequency conversion to the Amateur bands is suggested in Fig. 2b. Instead of mixing the s.s.b. signal twice, the v.f.o. energy only is mixed with the overtone crystal frequencies and the output of that mixing combined with the basic s.s.b. signal. This may reduce possible mixing distortion, inherent with all mixing.

s.s.b. signal on 5.5 Mc. This certainly is not easy, but can be done, as amply proved by Swan.

The physical layout of the transmitter is shown in Fig. 3. A bandswitch and plugs for power and control wires are located at the right hand side of the chassis.



Above-chassis view of S.s.b. Transmitter.

Finally, as shown in Fig. 2c, and being the system successfully used by the makers of the Swan Transceivers, the intermediate mixing stage V5 can be eliminated entirely provided a stable v.f.o. can be built with enough second and third harmonic output on 9 and 12 Mc. to mix directly with the original

Fig. 4 shows the complete basic circuit diagram of the block diagram of Fig. 1. The bandswitching has been omitted to simplify the circuit. It is obvious what circuits have to be switched to go from one band to another. It is strongly recommended to use plug-in coils if one cannot get the right five-gang ceramic switch assembly. Also the construction may be a bit involved for those who have only limited construction experience. There is ample space even in the small 9" x 12" layout to position plug-in coils between the tubes, close to the proper position in the circuit.

CARRIER OSCILLATOR

The simple Pierce type crystal oscillator is used, identical to the Collins b.f.o. circuit. Only 1 volt of carrier r.f. is required into the balanced modulator so the input to the oscillator is extremely small with the low screen voltage. For test purposes the other sideband carrier crystal can be switched in.

The carrier oscillator compartment should be shielded from the rest of the sideband generator sub-unit in order to prevent carrier leakage into corners where it is unwelcome.

BALANCED MODULATOR

This circuit is the PAOLZ single-ended pentagrid balanced modulator, not very well known outside Holland. The operating principle is simple, the cathode resistors, unbypassed for r.f. or a.f., cause a negative feedback, reducing the amplification of the carrier

| Overtone Osc. Frequency | S.S.B. Signal Frequency | Intermediate S.S.B. Freq. | V.F.O. Range | Output Range |
|-------------------------|-------------------------|---------------------------|--------------|--------------------|
| 13850 | 5500 U.S.B. | 19350 U.S.B. | 5350-5000 | 14000-14350 U.S.B. |
| 14850 | Same | 20350 U.S.B. | 6350-6000 | Same |
| 17850 | 5500 U.S.B. | 12350 L.S.B. | 5350-5200 | 7000-7150 L.S.B. |
| 18850 | Same | 13350 L.S.B. | 6350-6200 | Same |
| 14350 | 5500 U.S.B. | 8850 L.S.B. | 5350-5150 | 3500-3700 L.S.B. |
| 15350 | Same | 9850 L.S.B. | 6350-6150 | Same |

Table 1.

components. There is no need to use a Command set as oscillator, you can do a better job by building your own Clapp.

A bandpass filter in the output of the v.f.o. will secure strict v.f.o. fundamental output and little else, like harmonics. What can happen there is shown in Table 2.

Some overtone crystal frequency voltage will always be present in the output stage of V5 and it is wise not to let it beat with an unwanted v.f.o. harmonic and produce an unwanted signal within or close to the Amateur band. Changing the v.f.o. range to 6,000 to 6,350 Kc. will reduce this trouble greatly.

DRIVE AND FINAL

We now can expect a s.s.b. signal of 1 volt or more peak value on the desired Amateur band as output from V6 and this needs to be amplified to "drive" the final stage to full output. Almost everywhere one sees tubes like 6CL6, 12BY7, etc., applied as drivers and far too many home constructors

have had difficulties with instability of their driver stages. All these tubes should be properly neutralised because they are never meant to be used as straight r.f. amplifiers and lack the proper internal screening between control grid and plate. But a small receiver-type r.f. amplifier tube like the 6BA6 will do the "driver" job just as well, is perfectly screened, and does not need more care than normal bypassing and separation of input and output circuits. In stage V8 with 2.5 watts input to the 6BA6, the output tube could be driven into grid current on peaks.

The final amplifier used is the Philips/Mullard equivalent of the now famous 6DQ5. The amount of fixed grid bias required will depend on the value of the screengrid voltage applied, which should be kept below 200 volts. A standing plate current of 25 mA. is safe for the final without grid drive. Properly loaded, it can be driven up to 200 mA. plate current with steady tone input, but have mercy on the little tubes and don't overdo that treatment. The output under those conditions

is enough to light a 60 watt bulb to more than full brilliancy.

The output circuit is the common pi-coupler and the stage is properly neutralised. Some commercials are already recommending an indicator for correct neutralisation; adjust the neutralising condenser until maximum output coincides with the dip in the plate current.

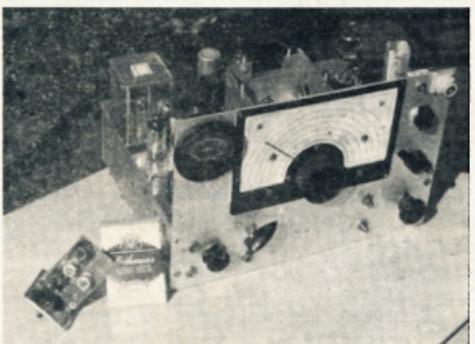
Finally, the a.l.c. diode should be added. The 10K potentiometer in its cathode adjusts the threshold of a.l.c. operation and its effect will be very noticeable.

NETTING

A final word on the netting arrangements. To a listener to a s.s.b. round-table there is nothing more annoying than to have to re-tune from one station to another when they are not all on the same frequency. Transceiver users should not have any trouble to be on the same frequency provided they use their receivers properly. Personally I feel that others should check their netting more frequently, which some may be reluctant to do because of the difficulties they have in doing so. Either their transmitter signal blocks their receiver or is too weak to determine correct zero-beat with stronger stations. Also, some badly operating balanced modulators can produce extra beat notes and make guesswork of which to use. In this set the variable resistor in the cathode of the "driver", with the function switch in the netting position, will allow adjustment of the strength of the beat note in one's own receiver to the desired level.

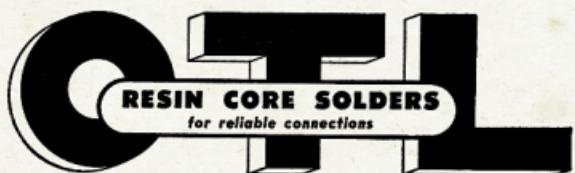
CONCLUSION

The performance of the prototype of this design has recently been heard by a fair number of stations on 40 metres and comparison with a signal from a Collins KWM-2 has been favourable. The unwanted sideband suppression can be better than 40 db. with proper adjustment of the crystal filter, and the a.l.c. feature helps to keep distortion products down.



Layout of front panel of the S.s.b. Transmitter.

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DAVID BILLS-THOMPSON*

GENERAL interest and activity in civil emergency services prompted the development of an inexpensive battery charger. Low cost was of primary importance and the search for components began among discarded electrical equipment at home. As the performance of the unit which was evolved proved to be very satisfactory, it was decided to make available those details which could be of use to people interested in W.I.C.E.N. and similar fields.

EQUIPMENT

An AT5 genemotor, which is rated at 26 volts input and 550 volts at 350 mA. output, was used with a 30 c.c. two-stroke engine.

COUPLING

By removing the fan from the genemotor, a small length of shaft was exposed. A bush was screwed to this, so that the unit could be direct coupled through a section of canvas rubber vacuum hose to a similar bush on the crankshaft. An output of 4 amps. at 12 volts was obtained with the first test. In this, the engine was operating at its maximum speed, which is not desirable for continuous use.

INCREASING THE OUTPUT

It was therefore necessary to increase the output of the generator for a given engine speed. This was achieved by connecting the two shunt fields in parallel. This increased the current through each coil and gave a higher flux density.

RECONNECTING THE FIELDS

To obtain this change in field connections, some of the binding tape was carefully removed to gain access to the internal connections of the thick series fields and the shunt fields. **N.B.** The shunt fields are of light gauge wire, and all physical disturbance of the winding must be kept to a minimum. Fig. 1 shows the original connection of the AT5 genemotor. The letters on the circuit indicate the ends of windings and their order shows the direction of current flow, i.e. the direction of current through the armature is from "C" to "D".

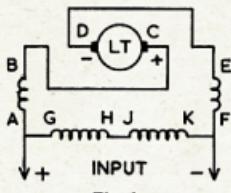


Fig. 1.

ELECTRIC STARTING

It should now be an easy matter to co-ordinate the series and shunt fields for an efficient start/generate circuit. A double pole double throw relay controlled by a push button was used in this unit. An ammeter and a cut-out were also included. The ammeter was wired so that it was not in circuit during starting. Fig. 2 shows the reconnection of the fields with the start relay, cut-out and ammeter. The letters identify the winding ends with those in Fig. 1.

REVERSING ROTATION

With the original internal connections, the armature rotation is anti-clockwise viewed at the fan end. Fig. 2 is drawn for the normal rotation, but in some cases it will be necessary to reverse this direction. Electrically, this can be done by two methods, i.e. reversing the armature connections, or by reversing the field connections. To maintain the correct h.t. polarity (negative to earth), the field connections should be reversed with respect to the armature. This means that the pairs of field connections shown in Fig. 2 as AF, HG and KJ should be reversed. Another possibility is to rotate the field system through 180° (two-pole machines only), but this simpler method may not be suitable for other types of genemotors.

PERFORMANCE

As a cumulative compound motor with 12 volts input it can provide 3 lbs./ft. of torque for starting the engine. The maximum charging rate was 12 amps. Using only one-third throttle opening,

the engine would run for about two hours on one pint of "petrol," with a charging rate of 6 amps.

H.T. END

The h.t. end was conserved for lighting purposes only. A 100 watt lamp

(Continued on Page 16)

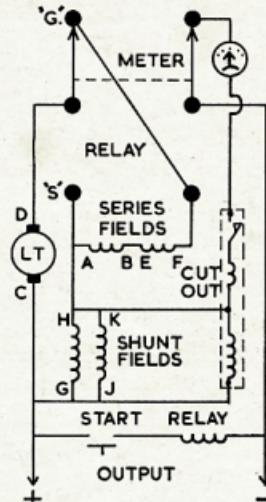
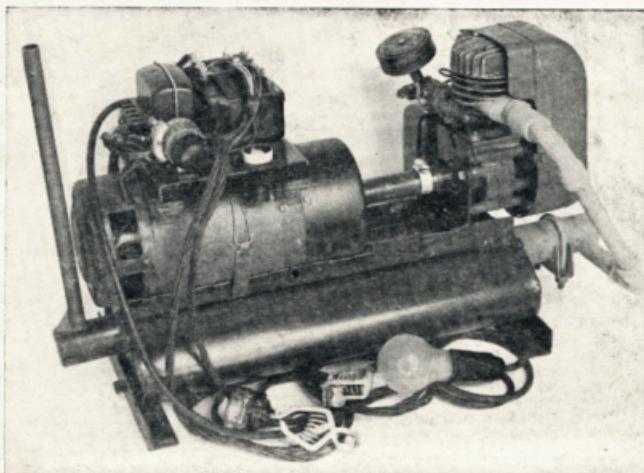


Fig. 2.



* 6a Fairmount Road, Hawthorn East, Vic.

Modifying the AR7 for S.S.B.

A. S. MATHER,* VK2JZ

THE modifications to be described will make the AR7 an almost ideal s.s.b. receiver and it will rival for Amateur-band operation the many excellent commercial receivers that are finding their way into Australian Amateur Stations, with the exception of the dial calibration. But even that could be remedied as will be discussed in the course of the article.

Although this article deals with the AR7, most of the modifications could be applied to any commercial receiver of a similar vintage.

It will be noted that it still leaves the AR7 with its normal coverage, as a communications receiver should it be desired; but for the Amateur bands, it should be used in conjunction with a crystal locked converter, so only 3.5 Mc. to 4 Mc. is tuned for optimum results.

Rather than attempt to show each modification separately, I thought it would serve the best purpose if the complete new circuit diagram was shown so it could be compared with the unmodified circuit and it will be obvious that there is very little left of the original.

The modifications will be dealt with under separate headings, any of which will improve the performance of the set either for a.m., c.w. or s.s.b.

TUBE COMPLEMENT

It is assumed that the filament wiring of the set has been altered to allow parallel operation of all filaments on 6.3v. a.c.

The 6U7Gs were replaced with EF39s and the 6K8G with an ECH33. The 6C8G second detector is removed and the socket is used for the 6SN7 audio a.g.c. tube. To this is added a 6BU8 product detector, a 150C1 voltage regulator, a 6BH6 100 Kc. marker oscillator, 6H6 noise limiter, and a 12AU7A a.g.c. rectifier and a.m. audio amplifier.

CAPACITORS

As there is a considerable amount of work to be done under the chassis, it is important that you remove all the original paper condensers and replace them with the newer, more efficient and smaller polyester types. The space gained will greatly facilitate the work of modifying the AR7, and although the originals may test satisfactorily, they have to be discarded. This applies to the 8 μ F. and 25 μ F. tubulars which can be replaced with advantage with the latest miniature types.

BANDSPREAD

A slow tuning rate is most important for s.s.b. and a crystal locked converter is used to heterodyne 28, 21, 14 and 7 Mc. to 3.5 Mc. A Band C coil box is modified to tune from 3.5 Mc. to 4 Mc. over the full range of the tuning dial. This takes care of 21, 14 and 7 Mc. and the first 500 Kc. of the 28 Mc. band.

* "Wolaroi," 14 William St., Singleton, N.S.W.

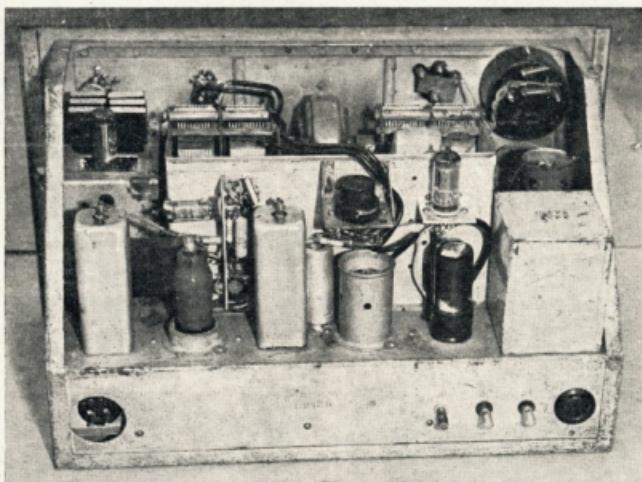
Rather than have less bandspread, I thought it better to settle for 3.5 Mc. to 4.0 Mc. tuning and use the original Band C coil box if necessary to tune all the 28 Mc. and 29 Mc. band if necessary.

AR7 coil boxes were very plentiful from disposals so a Band C box was modified by cannibalising another box for the series trimmers. The coils are not touched and only the trimmers were added in series with the coils and the original parallel trimmers and the 420 pF. ganged condensers as shown. It will be noted that no paddler condensers are used in the oscillator section.

A 50 pF. trimmer was fitted to the hole formerly occupied by the tone control and wired across the aerial tuning gang to peak the antenna coil on weak signals.

We now have electrical bandspread which will greatly help in tuning s.s.b. This can be further improved by the addition of a manual vernier. Mine was designed and presented to me by John VK2AKB and used a 1" diam. rubber wheel to engage when wanted the edge of the AR7 tuning dial and turned by a 1" metal knob.

The bandspread is, however, so good that I find that the extra vernier control is seldom used.



Rear view of Modified AR7. Xtal filter and V11 will be seen at top left. Components along rear of chassis are (left to right): IFT3, V5 (with shield removed), IFT4, V6, V8, V13 and output transformer. Mounted on brackets are V10 (above V5), V9 (above V6 and V8) and V7 (above V13).

The slug, series trimmer and parallel trimmer in the oscillator section are first adjusted to spread the oscillator tuning as evenly as possible between the 450 and 50 markings on the tuning dial.

Linear bandspread is not possible with this system and the best I could do was:

| | | | | |
|-----|-----------|---|-----|-----|
| 450 | dial mark | — | 3.5 | Mc. |
| 310 | " | " | 3.6 | " |
| 230 | " | " | 3.7 | " |
| 160 | " | " | 3.8 | " |
| 100 | " | " | 3.9 | " |
| 50 | " | " | 4.0 | " |

The 100 Kc. marker makes these adjustments easy and the 2nd r.f., 1st r.f. and aerial coil were then aligned to the new frequency coverage.

It is at this point that the reader's ingenuity could improve the performance of the AR7 as it was an intriguing thought that perhaps the dial could be made to count in the opposite direction. That is when the dial turned in an anti-clockwise direction which increases the frequency, the dial readings would also increase.

Therefore, if one was patient and with a more linear method of bandspread, each division could be made to equal 1 Kc. on the dial.

To read the frequency on any band (7 Mc. excepted in my case) the dial reading would be the band frequency plus the dial reading as the receiver tunes 3.5 Mc. to 4.0 Mc., 500 Kc.

Then, of course, it would be possible to fit a modern type dial and calibrate each band directly on it. I would certainly like to hear from anyone who has progressed along these lines. So much for that.

CRYSTAL FILTER

We now come to the half lattice crystal filter. This subject has been covered many times in "A.R.", "QST," "CQ," etc., and will only be dealt with in a general way in this article.

I use a channel 46 (455.5 Kc.) and a channel 47 (457.407 Kc.) crystal in the series mode of a half lattice configuration between the mixer and the 1st i.f. valve.

Although channel 44, 45, 48 and 49 crystals are shown shunted across the output of IFT1, I found that they had very little effect on improving the bandpass characteristic of the filter, but I left them in.

It would, of course, only be necessary to use any two adjacent channel crystals that are within the tuning range of the IFT's and the mixer oscillator frequency adjusted accordingly. Now I will stick my neck out and say I don't know how anyone manages to adjust such a filter as this without a wobbulator and c.r.o. No doubt some sort of results are possible using a frequency meter and output meter, but this is tedious, time consuming and the results at best a compromise.

The small effort required to build up a simple wobbulator will repay you with a classic bandpass curve approx. 3 Kc. wide with the maximum dip between peaks and very steep sides, 60 db. down and no secondary lobes.

With such a set up, you can immediately see where you are going and adjustment of IFT1, IFT2, IFT3 and IFT4 will quickly give you the required bandpass characteristic. This all sounds delightfully simple and it really is.

The original crystal holder and phasing condenser are removed and the 150C1 V/R and six FT241 sockets are installed on the metal cover above IFT1 and IFT2 as shown.

This filter will increase the i.f. gain so all leads must be kept as short as possible to avoid any instability, and shield the leads from IFT1 to the crystal sockets and from the crystal sockets to the grid of the first i.f. tube.

THE PRODUCT DETECTOR

The 6BU8 product detector is fitted between IFT4 and the 6SN7 a.g.c. socket (originally the 6CG6 socket). The original circuit was first described in "CQ" and later in "A.R.". When used as shown, the output is such that the first audio stage can be eliminated and the 6VG6 can be driven directly from the transformer secondary, a step up of 1.3. The 6BU8 only requires about 3 volts r.f. drive, and as the b.f.o. injection voltage is normally taken from a tap near the cold end of the 6CG6 b.f.o. coil, it is not sufficient. By removing the 0.05 μ F. by-pass condenser at the plate of the 6CG6 and feeding the control grid of the 6BU8 through a 0.001 μ F. condenser from the 6CG6 plate, approximately 4 volts of r.f. is obtainable.

¹ "A New Product Detector," "CQ," August 1959.
² Sideband Notes, "A.R.," April 1962.

Remove the connection from the a.g.c. line to the b.f.o. switch so when the b.f.o. is turned on, the a.g.c. line is not shorted to ground.

It is well to remember here that if you do not have sufficient b.f.o. injection voltage (the re-inserted carrier) then strong s.s.b. signals will cause overmodulation and the r.f. gain will have to be reduced with resultant loss of output to the audio stage.

The 6BU8 will, however, handle extremely strong signals before overload and easily out-performs all the other product detector tubes that I have tried.

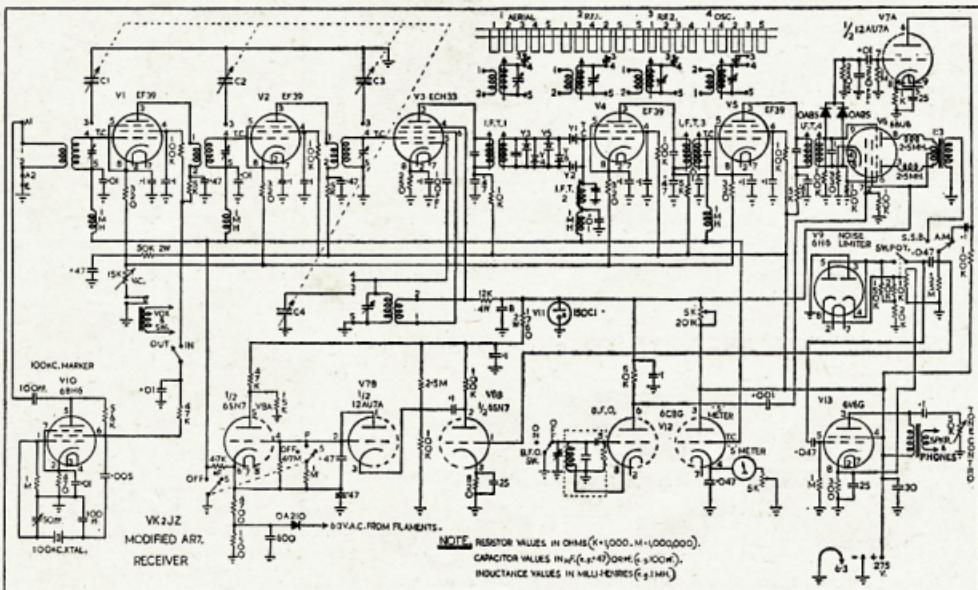
The output of the product detector is fed to one side of the s.p.d.t. rotary wafer switch fitted to the hole vacated by the phasing condenser.

The other side is connected to the output of the a.m. detector so this becomes the a.m.-s.s.b. switch.

A.M. DETECTOR AND AMPLIFIER

My receiver is used almost exclusively on s.s.b., but is capable of resolving quite easily any reasonable a.m. signal, DX or otherwise, in what is known as exalted a.m. reception, with the b.f.o. on.

The r.f. gain can be advanced and the 6BU8 makes quite a good a.m. detector without benefit of the b.f.o. as the tube apparently works in the form of a plate detector. However, I had a spare plate to be filled in and as greater signal handling ability with less distortion is obtainable from a diode detector, it was decided to install a diode rectifier for a.m. reception.





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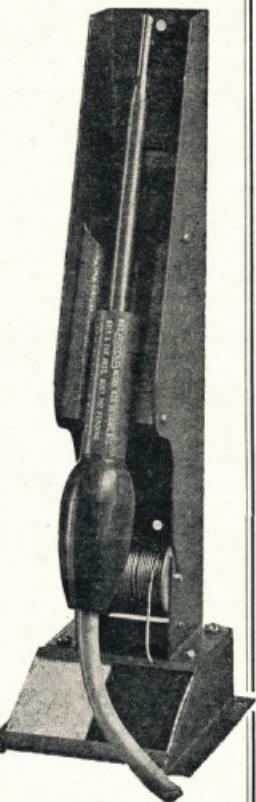
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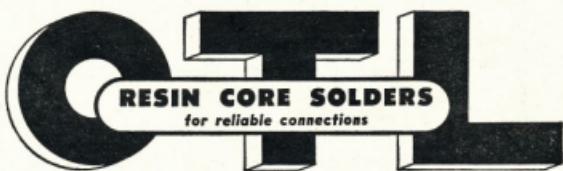
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AN IMPROVED T-NOTCH FILTER*

H. O. LORENZEN, W3BLC

T-NOTCH Filters have been popular with Amateurs for some time and a number of commercial receivers for the Amateur incorporate such circuits. On the crowded c.w. and s.s.b. bands, especially, the operators of today need a means of rejecting unwanted signals.

After experimenting with conventional T-notch filters with fair results, the writer decided to try some electronic tricks to deepen the notch and thus improve the effectiveness of the filter. The circuit finally evolved is shown in Fig. 1 and deepens the notch roughly an additional 15 db.

By utilising a double triode it was possible to make up for the insertion loss of the filter by using the gain from the first triode section of the 12AX7. This arrangement also allows the circuit to incorporate cathode coupling for the T-notch filter. The rest of the system is straightforward. The second half of the dual triode provides feedback which effectively increases the Q of the filter and hence the depth of the notch. Balance of the bridge in the filter is obtained by adjustment of the 25K ohms potentiometer. Once carefully set this adjustment need not be touched.

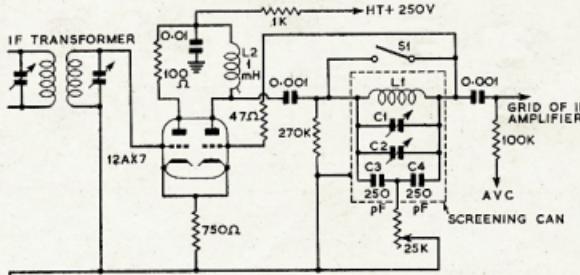


Fig. 1.—Circuit diagram of an Improved grid of the first half of the 12AX7 and the

T-Notch Filter. The connection between the i.f. transformer should be as short as possible.

By utilising a b.f.o. unit with air trimmers a fairly simple modification was effected. First the knob controlled trimmer C1 was reduced to just three plates (1 rotor and 2 stator) so that it would give a suitable vernier action. Next, on the second trimmer C2 all the fixed capacity plates were removed so that the variable section then gave a change in capacity of about 25 pF. Since the inductance of L1 was approximately 1 mH, out of the can, the two silver mica capacitors C3 and C4 (each 250 pF.) were placed across the coil and the centre point brought out to the 25K ohms balance potentiometer. One caution should be mentioned here: the inductance of L1 outside the can and in the can varies widely. In this case it was sufficiently different to be outside the range of the 25 pF. trimming capacitor C2. The writer spent a weary evening determining the correct capacity values of C3 and C4 until it finally dawned on him that the shield

L2 is not too much larger than 1 mH, or oscillation may result. All the tuned circuits in the T-notch filter should be carefully shielded.

A 12AT7 has the same base connections and a higher Gm than the 12AX7 but its characteristics apparently are not suited to this service. After numerous trials with differing component values the writer was unable to obtain the satisfactory smooth operation given by the 12AX7.

★

1963 PAKISTAN DAY DX CONTEST OFFICIAL RESULTS

Tiger Amateur Radio Club, Dacca, Cannt, held its first Pakistan Day DX Contest on the occasion of Pakistan Day on 23rd March, 1963. The Contest has been sponsored to establish maximum contacts with Radio Amateurs all over the world and to give new country and zones for D.O.C. award.

A handsome 14 x 11 inch oriental design certificate with T.A.R.C. golden seal affixed on varied colour ribbons has been issued to leading operators in each country/call area. VK3HL was the Australian winner and recipient of a certificate.

—VK4SS.

* Reprinted from R.S.G.B. "Bulletin," Feb. '63.

THE CALL OF THE UNTAMED

The time was 04 hours E.A.S.T. And twenty was as quiet could be. No one it seemed but me, Was waiting for one VK4HG.

If luck on me would but smile, This op. from stormy Willis Isle, Might hear me if I called a while— But I sensed a waiting pile.

Dark I risk a short blind shout, On the chance he'd be about. No harm, if it raised but sought So I tapped the call sign out.

Hell cut loose, as thousands bawled 4HG they blindly called. And while the QRM hung paled, Beams were swung and wildly hauled.

A lonely TIS was there. With a note like that done rare. As other tuned, I do declare, Twas like a madman's nightmare.

Code and sideband vied for space, In this mad DX race. And to help it on its way, The a.m. men joined in the chase.

And from the low end to the high, For a circle space did lie. That DX burst from the sky Hounding one unlucky guy.

Calling for an hour straight With every guile and every bait. The weakest at the wall must wait, For in this, no man's a mate.

But where was Willis, all this while? Only silence from the Isle, Echoed back 6,000 mile. To the madly waiting pile.

But did the truth ever dawn, On the tumult, greedy, torn, That Willis, isolate, forlorn, Had never sent a sig that morn.

—Al, VK4SS.

TECHNICAL ARTICLES

Readers are requested to submit articles for publication in "A.R." in particular constructional articles, photographs of stations and gear, together with articles suitable for beginners, are required.



Manuscripts should preferably be typewritten but if handwritten please double space the writing. Drawings will be done by "A.R." staff.



Photographs will be returned if the sender's name and address is shown on the back of each photograph submitted.



Please address all articles to the
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INTERNATIONAL
RADIO AMATEUR

WORLD PREFIX MAP

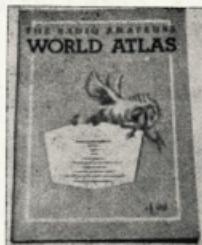
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VK-ZL OCEANIA DX CONTEST, 1963

W.I.A. and N.Z.A.R.T., the National Amateur Associations in Australia and New Zealand, invite world wide participation in this year's VK-ZL Oceania DX Contest.

Objects: For the world to contact VK, ZL and Oceania stations and vice versa.

When? Phone: 24 hours from 1000 GMT, Saturday, 5th October, to 1000 GMT, Sunday, 6th October. **C.W.:** 24 hours from 1000 GMT, Saturday, 12th October, to 1000 GMT, Sunday, 13th October.

RULES

1. There shall be three main sections to the Contest:-

- (a) Transmitting phone.
- (b) Transmitting c.w.
- (c) Receiving—phone and c.w.

2. The Contest is open to all licensed Amateur transmitting stations in any part of the world. No prior entry need be made. Mobile Marine or other non land-based stations are not permitted to enter the Contest.

3. All Amateur frequency bands may be used but no cross-band operation is permitted.

4. Phone will be used during the first week-end and c.w. during the second week-end. Stations entering both sections must submit separate logs.

5. Only one contact per band is permitted with any one station for scoring purposes.

6. Only one licensed Amateur is permitted to operate any one station under the owner's call sign. Should two or more operate any particular station, each will be considered a competitor, and must submit a separate log under his own call sign. (Not applicable to overseas stations.)

7. Entrants must operate within the terms of their licences.

8. **Cyphers:** Before points can be claimed for a contact, serial numbers must be exchanged and acknowledged. The serial number of five or six figures will be made up of the RS (telephony) or RST (c.w.) report plus three figures which may begin with any number between 001 and 100 for the first contact, and which will increase in value by one for each successive contact; e.g. if the number chosen for the first contact is 053, then the second must be 054, followed by 055, 056, etc. If any contestant reaches 999, he will start again from 001.

9. **Scoring:** (a) For Oceania Stations other than VK/ZL: 2 points for each contact on a specified band with VK/ZL stations; 1 point for each contact on a specific band with the rest of the world.

(b) For Rest of the World other than VK/ZL: 2 points for each contact on a specific band with VK/ZL stations; 1 point for each contact on a specific band with Oceania stations other than VK/ZL.

(c) For VK/ZL Stations: 5 points for each contact on a specific band and in

addition, for each new country worked on that band, **bonus points** on the following scale will be added:

| | | | |
|-----|---------|-----|--------|
| 1st | contact | —50 | points |
| 2nd | " | 40 | " |
| 3rd | " | 30 | " |
| 4th | " | 20 | " |
| 5th | " | 10 | " |

For this purpose the A.R.R.L. countries list will be used with the exception that each **call area** of W/K, JA, SM, UA will count as "countries" for scoring purposes as indicated above.

10. Logs. (i) Overseas Stations:

(a) **Logs** to show in this order: date, time in GMT, call sign of station contacted, band, serial number sent, serial number received, points. **Underline** each new VK/ZL call area contacted and use a different log for each band.

(b) **Summary** to show: call sign, name and address (**block letters**), details of equipment, total score by showing sum of VK/ZL call areas worked on all bands and total points for all bands. Sign a declaration that all rules and regulations were observed.

(ii) **VK/ZL Stations:** (a) **Logs** must show in this order: date, time in GMT, call sign of station contacted, band, serial number sent, serial number received, contact points, bonus points. Use a **separate log for each band**.

(b) **Summary** to show: call sign, name and address in **block letters**, score for each band by adding contact and bonus points for that band and as well, **total score** by adding band scores together, details of equipment used and power, declaration that all rules and regulations have been observed.

11. The right is reserved to disqualify any entrant who, during the Contest, has not observed regulations or who has consistently departed from the accepted code of operating ethics.

12. The ruling of the Federal Contest Committee of the Wireless Institute of Australia will be final.

13. **Awards.** **VK-ZL Stations:** The W.I.A. will award certificates to the top scorer on each band and the top scorer in each VK-ZL district.

Overseas Stations: Certificates will be awarded to each country (call area in W/K, JA, SM, UA) on the following basis:

1. Top scorer using "all bands".
2. Top scorers on individual bands.
3. To those with minimum contact requirements to be determined by conditions and activity prevailing.

14. **Entries from VK-ZL Stations** should be posted direct to Federal Contest Committee, Wireless Institute of Australia, Box 638J, G.P.O., Brisbane, Australia, to arrive not later than 31st December, 1963.

Entries from **Overseas Stations** should be posted to Federal Contest Committee, Wireless Institute of Australia, Box 638J, G.P.O., Brisbane, Australia, to arrive not later than 19th January, 1964.

RECEIVING SECTION

1. The rules are the same as for the transmitting section, but it is open to all members of any S.w.l. Society in

the world. No transmitting station is permitted to enter this section.

2. The Contest times and logging of stations on each band per week-end are as for the transmitting section.

3. To count for points, logs will take the same form as for the transmitting section as follows: date, time (GMT), call of the station heard, serial number sent by the station heard, band, points claimed. Scoring is on the same basis as for the transmitting section and the summary sheet should be similarly set out.

4. Overseas stations may log **only** VK-ZL stations, but VK receiving stations may log overseas stations and ZL stations; while ZL receiving stations may log overseas stations and VK stations.

5. Certificates will be awarded to the top scorer in each VK-ZL call area and in each overseas scoring area.

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The pointer has a horizontal travel of 7 inches. A circular vernier scale, marked over 100 divisions, rotates five times for one traverse of the pointer, and, read with the "100" scale on the dial, provides a total of 500 divisions.

A diecast escutcheon, finished glossy black, is supplied and the assembly is complete with perspex window, knob, fixing screws, and mounting template. Overall external dimensions are 9-3/16" (23.34 cms.) by 53/8" (14.6 cms.). Weight is approx. 1 lb. 14 ozs. (0.85 kilograms).

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C.C. CONVERTER FOR 576 Mc.

(Continued from Page 13)

OPERATING CONDITIONS

6BL8 oscillator: 100 v. at 5 mA.
6BL8 doubler: 185 v. at 5.5 mA.
12AT7 doubler: 220 v. at 5 mA.
12AT7 tripler: 220 v. at 4.5 mA.
6J6 doubler: 65 v. at 3 mA.
6C4 cathode follower: 230 v. at 4.5 mA.
6CW4 mixer: 65 v. at 3 mA.
EC88 r.f. amplifier(s): 160 v. at 12.5 mA. each.
Total current drain (excluding EC88s) 35 mA. at 230 v.

PERFORMANCE

No accurate test equipment was available for checking the performance of the converter, however an approximate measurement indicates a noise figure of about 10 db. At the time of writing, an r.f. amplifier using a special low noise u.h.f. tube is under construction and this should bring the noise figure down to 5 db. A description of this amplifier should follow soon.

Activity on 576 Mc. is very limited and as a result, literature on this band is very scarce. The author would welcome any correspondence regarding this and other u.h.f. bands.

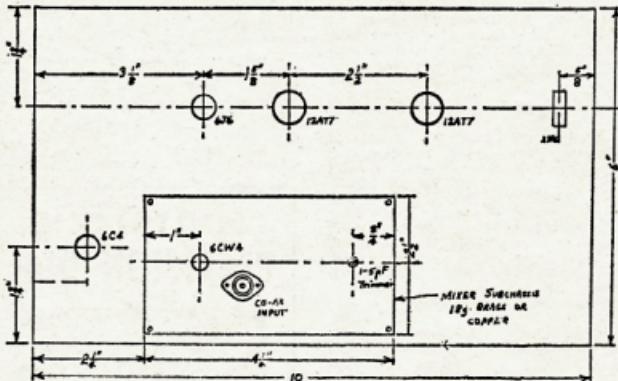


Fig. 4.—Converter Layout. Chassis: 16 gauge aluminium, 10 x 6 x 2 1/2 inches.

HINTS AND KINKS

PRINTED CIRCUITS—COMPONENT REMOVAL

Removal of components from printed circuit boards can be simplified by the use of the following equipment. Furthermore, heat damage to diodes and transistors can be kept to a minimum by this method.

Procedure: Use a vacuum cleaner fitted with a suitable length of strong walled p.v.c. tubing (or brewer's hose) of about 15-20 mm. diameter connected to the suction side of the cleaner.

Suitably fit into the working end of the larger diameter p.v.c. tubing, a short length of 3-4 mm. teflon tubing (about 1 inch length is ample).

Apply a hot soldering iron to the area of printed circuits until solder melts freely, then suck away the molten solder. Solder shall be completely removed, leaving the pigtail and the feed-through holes clear, giving easy access to bend pigtail for component removal.

Where suspect transistors are removed for testing, continued application of suction has a cooling effect on the pigtail.

The 15-20 mm. tubing should not be longer than that to give convenient use of the vacuum cleaner on the workshop

bench. The 1 inch length of 3-4 mm. teflon tubing is specified for two reasons:—

- (1) To keep the suction pressure up.
- (2) When solder is sucked up, it will set and lodge in a long length. It is a good practice to clean out the tubing (the 1 inch length) after each clean up of a solder point.

Caution! Teflon (tetrafluoroethylene-polymer) will give off slight gasses above 250-275°C. which under prolonged dosage can be fatal.



AMENDMENTS TO R.D. CONTEST RULES

Rule 2: Members and non-members of the W.I.A. will be eligible for the awards.

Rule 14: Northern Territory and A.C.T. will both count as separate call areas for award purposes only.



ACKNOWLEDGMENT

It is regretted that credit was omitted from the article "Profile of VK3ZEB" published in the last issue. We are indebted to N. Town, VK3ANK for providing this article.

PORTABLE BATTERY CHARGER

(Continued from Page 7)

could be operated to more than full brilliance, while a charging rate of 2 amps was being maintained through the battery.

CHECKING "SLIP" ON THE COUPLING UNIT

This was done by using a small neon lamp as a "strobe-light." Only one lead was used. This was connected to the spark plug, the other was insulated. (See Fig. 3.) When the engine is running at full load, hold the neon near the coupling unit. If there is no "slip" the coupling will appear to be stationary. This test should be carried out in darkness for convincing results.

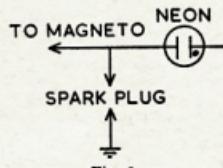


Fig. 3.

NOISE SUPPRESSION

No attempt was made to regulate the voltage or provide any means of filtering. Likewise ignition suppression was not incorporated, but may be considered according to requirements. The complete motor-generator was mounted on a Holden muffler, which provided a rigid base and a good means of silencing the exhaust. To remove condensation from the silencer, a drain plug was fitted at its lowest point.

USE

The prototype was tested over a period of two weeks in December 1962, when it gave a reliable performance with adequate charging and lighting facilities in a mobile marine station. The unit is continuing to prove invaluable, when operating a portable station in areas where electric supply is unavailable.



MODIFYING AR7 FOR S.S.B.

(Continued from Page 11)

those who tackle the job should have no trouble doing them their own way.

It should be obvious that extensive use of plastic covered shielded wire will have to be made, especially to the various controls.

I trust that you have been interested in the modifications to the AR7. You will no doubt be able to criticise or improve many of them, and I would like to hear from others who have carried out modifications.

An extra triode, for instance, could be made available by replacing the 6V6G with a 6BM8 or similar output triode-pentode. However, these modifications will do two things for sure. Give you a really hot s.s.b. receiver which is a pleasure to operate, and teach you a little more about s.s.b. receiver techniques whilst you are carrying them out.

VK5JE OBTAINS D.X.C.C. ON 7 Mc.

LIST OF COUNTRIES SUBMITTED FOR D.X.C.C.

The following countries were submitted for D.X.C.C. award. Figures in the right hand column indicate number of times a QSO was had with that country.

| | | | | | | |
|----------------|----------|-----|---------|---------------|---|-----|
| CM | — | 2 | KR6 | — | — | 6 |
| CR9 | — | 2 | KS4 | — | — | 3 |
| DL | — | 32 | KS5 | — | — | 3 |
| DU | — | 1 | KV4 | — | — | 1 |
| EA | — | 5 | KW6 | — | — | 5 |
| EL | — | 2 | KX6 | — | — | 2 |
| EP1 | — | 1 | KZ5 | — | — | 1 |
| FA8 | — | 2 | LA | — | — | 1 |
| FB | — | 10 | PA04 | — | — | 10 |
| FK3 | — | 6 | OA | — | — | 1 |
| G | — | 60 | OE | — | — | 2 |
| GI | — | 1 | OH | — | — | 16 |
| GW | — | 1 | OK | — | — | 7 |
| HA | — | 3 | PA0 | — | — | 6 |
| HB | — | 6 | PA0 | — | — | 6 |
| HC | — | 2 | SM | — | — | 10 |
| HK | — | 3 | SP | — | — | 1 |
| HL | — | 6 | TT | — | — | 1 |
| HM | — | 4 | VA1 | — | — | 1 |
| HS | — | 3 | UA0 | — | — | 15 |
| HZ | — | 1 | UB5 | — | — | 4 |
| I | — | 7 | UC2 | — | — | 1 |
| JA | — | 183 | UL7 | — | — | 1 |
| KW (see below) | — | 7 | VE | — | — | 174 |
| KC4 | — | 5 | VK1 | Macquarie | — | 4 |
| KC8 | — | 5 | VK2 | Lord Howe Is. | — | 1 |
| KH6 | Hawaii | 57 | VK7 | — | — | 2 |
| KH6 | Kure Is. | 2 | VK9 | Papua | — | 2 |
| KJ4 | — | 1 | VK9 | N. Guinea | — | 3 |
| KL7 | — | 1 | VK9 | Norfolk Is. | — | 3 |
| KM6 | — | 30 | VP5 | — | — | 1 |
| KP4 | — | 13 | VP6 | — | — | 2 |
| KP6 | — | 2 | VP7 | — | — | 1 |
| | | | VP7 | — | — | 1 |
| | | | VP8 | — | — | 6 |
| | | | VQ3 | — | — | 6 |
| | | | VQ4/5H3 | — | — | 12 |
| | | | VR1 | — | — | 7 |
| | | | VR2 | — | — | 14 |
| | | | VR3 | — | — | 1 |
| | | | VR4 | — | — | 1 |
| | | | VR5 | — | — | 1 |
| | | | VS1 | — | — | 14 |
| | | | VS2/SM2 | — | — | 4 |
| | | | VS3 | — | — | 2 |
| | | | VS6 | — | — | 1 |
| | | | VS7 | — | — | 1 |
| | | | VS9 | — | — | 1 |
| | | | VU | — | — | 1 |
| | | | XE | — | — | 8 |
| | | | YI | — | — | 4 |
| | | | YO | — | — | 1 |
| | | | YS | — | — | 1 |
| | | | YU | — | — | 1 |
| | | | YV | — | — | 1 |
| | | | ZB | — | — | 12 |
| | | | ZC | — | — | 1 |
| | | | ZD6 | — | — | 1 |
| | | | ZE | — | — | 1 |
| | | | ZK | — | — | 2 |
| | | | ZL | — | — | 1 |
| | | | ZM6 | — | — | 1 |
| | | | ZS | — | — | 14 |
| | | | 9Q5 | Congo | — | 1 |
| | | | 4X4 | — | — | 3 |
| | | | 5X2 | Uganda | — | 1 |
| | | | 5N2 | — | — | 4 |

The following have been worked but as yet no QSL has been received:—

| | | | | | | |
|-------|---|----|---------------|---|---|-----|
| KG6 | — | 13 | FW8 | — | — | 1 |
| | — | 1 | HI | — | — | 342 |
| LG1 | — | — | AC4 (Phoney?) | — | — | 589 |
| FB8XX | — | 1 | | | | 390 |

The above indicates that 934 DX contacts (excluding W and ZL) have been made on 7 Mc.

Below are details of W QSOs (this includes many repeat QSOs with the same station but no skeds kept):—

| | | | | | | |
|----|---|-----|----|---|---|-----|
| W1 | — | 315 | W6 | — | — | 893 |
| W2 | — | 811 | W1 | — | — | 342 |
| W3 | — | 450 | W8 | — | — | 589 |
| W4 | — | 444 | W9 | — | — | 390 |
| W5 | — | 671 | W0 | — | — | 355 |

The grand total of DX worked on 7 Mc. is 934 plus 4,837 W contacts, making a total of 5,771 (excluding ZL of course).

For those interested in statistics, the above figures have been tabulated in yearly QSOs also and this information is available for the asking of VK5JE.

Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

INTERNATIONAL FRIENDSHIP

Editor "A.R." Dear Sir,

On more than one occasion in the past I have received W QSLs carrying, besides the relevant Ham, the caption "Hams for Christ," etc.

These Hams who use (or allow to be used) Amateur Radio for religious campaigning, are taking the first step to destroy Amateur Radio's finest spirit, i.e. true friendship.

While I readily admit that one's personal philosophy and religion must encompass every aspect of one's existence, the introduction of a flavouring of religion, politics or color or creed into Amateur Radio will soon render suspect the now impeccable hand of international friendship which exists.

—Al Shawsmith, VK5SS.



HISTORICAL GLEANINGS—1914

In this year, under the title of "Wireless in Australia," the (then) Wireless Institute of Victoria, of Oxford Chambers in Bourke St, Melbourne, published a booklet containing the following information about Australian radio stations:—

Commercial calls, land stations (including Army and Navy stations), 33.

Commercial calls, ship stations (including all Navy and Merchant Marine ships frequenting Australian waters), 39.

Experimental calls: N.S.W. 167, Vic. 185, Qld. 10, S.A. 20, W.A. 12, Tas. 10, total 404.

The preface of the booklet stated that it was the first of its kind for Australia and had a long felt want by Wireless Experimenters. The booklet also quoted some of the objects of the Wireless Institute of Victoria. These were very simple and served as a basis for the constitution under which W.I.A. operates today.

The then-heress of W.I. (Vic.) at this time were President Vernon Cole, Vice-President, W. King Witt (XKW) and F. F. O'Hannessy, Council: Douglas Harrison, Herman Lindow and John Strickland (XJS); Hon. Corresp. Sec., W. McRae; Hon. Sec., R. Dodson; Hon. Org. Sec., John Welch (XKW); Hon. Trans. Sec., Angus MacGregor (XJEA); Postal Address, Box 106, G.P.O., Melbourne; official station call sign, XPKJ.

Offices of W.I. (N.S.W.) were President, C. P. Bartholomew (XBM); Hon. Sec., Malcolm Perry (XCP); Assistant, Hon. Sec., N. H. Wright (XQX); Postal address, Box 2, King St, P.O., Sydney; official station call sign, XADK.

Advertisers were: Lawrence & Hansen, Marconi Telefunken School of Radiotelegraphy, MacLurcan & Lane, Warburton & Franki Melb. Ltd.

Amongst the items offered for sale, which only have historical value, were h.t. coils and spark gaps.

Prior to the publication of this booklet, the information available is somewhat sketchy; however, sufficient are that individual experimenters were at work as early as 1900.

In 1901 Bill Jenvey made the first wireless tests with the S.S. "Ophir," when King George V (then Duke of York) visited Australia.

By 1908 quite a few spark coil transmitters were being used by experimenters—receivers employed Coherer detectors which consisted of a tube full of filings which were caused to cohere by the incoming signal, and decohere upon receipt of vibrations from a buzzer or bell.

1909 saw the introduction of galena and iron pyrite detectors complete with catwhiskers.

In 1910 occurred the first recorded incident of Amateur interference with another service. An unfortunate event, as the one affected was that of a ship in distress; however the situation was recouped in 1911 by another Amateur, who was the only one to hear and report a ship's distress signal. Both events took place in U.S.A.



There is no doubt that Amateur Radio proves a good training ground for future trained personnel in times of National emergency. (Are you on the beam, Canberra?)

Returning to Adelaide in 1946, Ted was given the call VK5JE, his old one having lapsed, and resumed activities on 14 Mc. The sudden growth in the popularity of three element beams made competition a bit too fierce so it wasn't long before eyes were cast on 7 Mc. Did it hold any possibilities for DX? Most of the gang said, "Who cares," but nevertheless it must be remembered that it is a Ham band after all.

Well after 11 years' work on the band D.X.C.C. has at last been acknowledged with Certificate No. 77. Ted comments, "Guess it is time to see what 80 and 160 metres really offers. What's that I hear?" "What about 6 and 2 metres?" "Maybe I get a bit nostalgic for my first love after Hamming for 37 years."

Greetings once again. Winter seems to have claimed its victims once again with the seasonal fall off in activity. Judging by the various reports of seasonal influence that has extended to all States who have experienced a trying winter. The mid-winter 50 Mc. openings were quite good around the Eastern States with DX between VK5, VK3, VK4, VK7 and similar to ZL2Z. There were no forthcoming (very convenient). A surprise here was an opening to Launceston on 23rd June, when Col VK1LZ worked VK3ZHH and myself—proven that watching t.v. pays dividends.

Some DX reports from the various Divisions with the upshot minima being reached early next year. Predictions are for an exceptional amount of short skip openings on 50 Mc. It might be possible to repeat 144 Mc. DX achievement of the past two years. What would be necessary to see if a W.A.S. on 144 Mc. will occur here in VK—those with a number of States worked will, I'm sure, be working overtime to increase their tally. One man worth watching this year will be the VK3 VK5 VK6 VK7 VK8 VK9 VK10 VK11 VK12. This year on 50 Mc between VK3 and VK6 (Kalgoorlie area) should be worth watching as last season there was a number of openings across this path when no other VK6s were heard. I am appealing once again for correspondents to augment the material from the existing Divisional scribes, particularly from Northern QLD, Broken Hill area, Northern N.S.W., West QLD, and Eastern Victoria. In fact, anywhere there is v.h.f. activity in VK from the capital cities. Individual Amateurs or S.W.L.s are most welcome sources of additional information. No matter how small, please drop me a line and let me know what's going in your area. I will be happy to publish a short picture of v.h.f. activity in VK. Details of any special efforts to work DX on v.h.f. will receive full publicity if you will only supply the details (by the first of the month please).

V.H.F. news and comments are welcome for their interest in the 70 C.M. band. Their Gentlemen's Agreement on the division of the band for stabilised and unstabilised gear and a.t.v. could well be used by all States. We trust that all Divisions can agree on something similar. See under VK6 notes for details of same.

Would the Secretary of the Burdekin (Qld.) Club please contact me again as I have mislaid his recent letter—my apologies.

Also would the Secretary of the Club please forward his notes to me at the above address—not to Bill's (SARZ) address—VK3ZGP.

NEW SOUTH WALES

The June Fox Hunt, organised by Dick SZ2Z, turned out to be quite a success. Coming at a time when Sydney was having an unusual (?) amount of "wet" and being the dead of winter, a very good roll up of starters commenced the Hunt. 8 to 10 number (couldn't see two) well, and at the appointed time, with much screaming of tyres, the hunt departed, posted in the direction of the Fox. First reported casualty was ZZSS, who lost his beam. Likewise John ZZAV who snapped the boom. Bob 2ASZ had better take bow for his effort in running the Long Distance leg and most of the body had been raving about it. The winners of the Wednesday night Hunt were ZZPJ first, with ZZIP and 2AWZ following. The Fox was held up at a little reserve at Collingwood.

Transistor gear looks like getting a shot in the arm very shortly, with Les 2ZBZ and Terry 2ZBL doing some dabbling with transistor tx's, converters, rx's and the like.

This was helped along by the importation of a transistored F.M. receiver plane power transistor which are now available at about 30/- each and have a collector dissipation of 3W. Les has made a contact from Camden to Horrie at Armidale, using one of these, and Terry has made a contact from Armidale to about 15 miles with SB to 9 reports. Les has been coerced into giving information on his converter and circuits for tx and rx will be available soon. If you can't wait, write to me and I'll try and scribble out a legitimate circuit for you—also sources for transistors.

Noel 2ZNS is hitting the sideband trail soon with metal work and v.f.o. already under way, also has fm. for 2 mx coming along. Reg ZZMR has been having a little trouble with his 146

Mc. fm. net car phone, but when last heard was putting in a hammering big signal. David ZZVW has gotten along with his inductor coils with 12SW, on 6 mx, fm, and is once again getting under way on a linear for 6 mx s.s.b. Incidentally, we lose Basil ZZLB from the ranks shortly when he takes up his new post in W.A. about the middle of next year. Best regards, Basil and let's hope there are plenty of VKs to VK3 breakthroughs for the next few years.

6 mx DX has been very patchy once again and the only opening really worth reporting is from Keith ZZVL, who says that was an opening to ZL for about three hours on 23rd June, and is shown in the log for that month. Roger ZZRH reports that VK4s and VK5s were lifting above the noise over the last couple of week-ends, but not long enough to make a contact.

I have some notes from Max ZZMM at Raymond Terrace, but the main things are the same things—they still listen for signs from Sydney, but never hear anyone. Next month I will give more details of doings in the Hunter area, but for the moment we're running out of space. Thanks for the info, Mac, and keep it coming.

Lastly, don't forget the new style Day Fox Hunt on 11th August, with Paul ZZPJ as Fox and starting place to be announced. (Watch coming).

That's it for another month and keep me informed of what's going on fellas. Somebody must be interested! 73, ZZBL.

VICTORIA

The V.h.f. Group meeting was held on 19th June at 478 Victoria Pde, East Melbourne. 3ZJN was in the chair with some 40 persons present. The first item of business was the presentation to ZS2A of his VK100 Certificate; good going, Graham!

3ZJN reported that the last Fox Hunt led by 3ZGZ attracted five hounds and was full of "incidents" and was eventually won by 3ZJF. The Fox Hunt is held on the second Wednesday of each month, commencing on the 2nd of July, at the Collingwood Clubrooms adjacent to the Foundling Home. New starters are most welcome. Starting time, 8 p.m.

Discussion then began on proposals to investigate some form of band planning on 2 mx and 70 Cm. 3ARZ spoke on using 144-0-144.10 Mc. as a segment for country Amateurs by restricting it to stations outside a 50-mile radius of Melbourne. The Sec., 3ZGP, described the R.S.C.B. 2 mx band plan, which divides the U.K. into zones, each zone using a particular segment of 2 mx and 70 Cm. Quite a number of Amateurs spoke on the proposals and it was referred to the Investigating Committee to make firm proposals and submit them to all Amateurs.

The N.F.D. came up for discussion regarding the V.h.f. Field Day, and it was decided that the V.h.f. Field Day would cover the same hours as the N.P.D.

A talk on 3 Cm gear by 3ZGM, and 3ALZ's 1294 Mc. g.d.o. followed, concluding with refreshments.

3ZJN: This band has been getting more than its usual share of activity with almost fortnightly DX openings and it has brought quite a number of new stations on to the band. June 23 provided quite an interesting opening to ZL, who worked 3ZGZ, 3ZGP, Col, and was copying Col from Bendigo at the time. See t.v.s. has its uses after all.

144 Mc.: Although the weather has been really wintry, activity is being kept alive by the few stalwarts. 3VL at Numurkah is being very active, and Melbourne 3ZER has s.s.b. going and is putting good signals from Melbourne; is running up to a ZL linear, ex 3ZMV. It is also rumoured that ZL might soon follow suit on 6 and 2 mx.

VK3 6 Mc. A.M. Net: Since its inception some two months ago this net has steadily expanded and now has over 100 stations on the air, including many back. Some 70 odd ex mobile radio-telephones of the Reporter MK. 1 variety have been distributed through VK3 disposals and a majority of these went to the country areas connected with 5092, the crystal control tx. In the metropolitan area 3ZL, 3ZGD, 3ZGM, 3RF, 3ZFS are using modified units, while 3AL1 (converted 3Z2) and 3KC are using normal home stations. SAHL has s.s.b. available, plus a.m. on the frequency.

3ALZ is modifying units and has all the know how. If you require your unit to be converted, Ian can obtain a reasonable charge. If you have any queries, contact 3ALZ (please enclose s.a.e. if writing). He has compiled an article for "A.R." which should appear soon. (Ian's home phone number is 306-794 and the best time to call is between 5-6 p.m.). 73, 3ZGP.

SOUTH AUSTRALIA

50 Mc.: The poor level of activity on this band was relieved by an opening to VK4 on 23rd June at 1200 hrs. C.S.T. 4ZAC, who was working by 3ZBZ, 3ZMR and others, offered information that he had been viewing Channel 2 t.v. from VK2, VK3, VK5 and VK7 all the previous week (i.e. week ending 23rd June). So it appears there may have been a few openings that we did not know of. This is not unusual, as when considering the VK5 beacon has been off the air for about one month.

Gen 5ZEE has a new mobile on 6 mx, running about 5w. to a 12VBTVA. If Bob 3ZGZ doesn't write that article for "A.R." we'll write the VK5 beacon soon. I'll write the darned thing myself.

144 Mc.: Activity on this band is fairly low, the fellows seem to be concentrating on 40 cm. 3ZJN has been working on a 3Z2A up with an 832A (equivalent) as a straight amplifier driving a QGE06/40. Mick hung a new crystal in the tx so that the 832A was being driven at 137 Mc. instead of 144 Mc. He then took the cathode of the 832A off and fed it into the front end of a 7 Mc. "Command" tx. There is then adequate drive to the QGE06/40 from this power mixer. This hydrotype v.f.o. is very stable and is better than the metal crystal. I guess that that's saying much. It is remarkable to see that Mick is no longer bothered by certain moral convictions that used to inhibit his use of v.f.o.'s two or three years ago.

General News: Probably the biggest thing this month was the Fox Hunt on 29th June. About 100 in 11 cm. turned up, some can be seen on 2 mx, six on 1 mx and one on 6 cm. on 6 mx. The fox was run on strictly a "mileage covered" basis. The outright winner was Douglas 3ZK, second was 3ZK with 3ZBR/3ZGZ third. The SLA assisted your conductor as fox.

To facilitate the dissemination of the weekly SWI session, the V.h.f. Group is building a 144 Mc. relay tx. This rig will use a QGE06/40 p.a. and will be completed shortly. The SLA is managing the repeater. The SLA managing broadcast is being conducted. Bob 3ZDX is in charge of the project and has been very ably assisted by donations of parts from many of the local Ham groups.

The V.h.f. group in VK5 is staffed predominantly by v.h.f. operators and has been doing a very good job recently. Recent purchases have permitted members to obtain 25 yard lengths of RG58U (equivalent) at 10/- each, 50 yard lengths of center feed cable at 30/- each, and 30 ft. concentric trimmers at 6d. each. More active members of the Disposals Committee include 3IL, 3ZQ, 3ZK, and these chaps are assisted by 3ZKZ, 73, 3ZCR.

WESTERN AUSTRALIA

Winter has come to VK6, the farmers now complain we have too much rain, but luckily 24 members braved the elements to attend the June meeting of the V.h.f. Group. The major items arising were the proposed new 50 and 144 Mc. bands and the use of 40 cm. on the use of frequencies in the new 450-455 Mc. band which is reported under 430 Mc. news.

The new beacons proposed will be constructed by the Group to replace those at present in use. The new beacons will have an 815 in the final and run approx. 50w. The identification will be VK6VF impressed by f.s.k. This method enables more power and easier identification of the weak signal. The committee says that will also allow them to use to align converters and receivers.

V.h.f. Scramble: The all-band scramble results are as follows: 3LX 73 pts., 3ZAA 63 pts., 3ZDZ 62 pts., 3ZAG 33 pts. and 3ZDM 32 pts. 3MM 37 claimed 73 pts. and won a special section for stations over 50 miles. This Scramble

showed many of our locals' shortcomings in their gear which are being rapidly rectified.

59 Mc.: Doug 6ZDW, Graham 6ZDE and Ken 6ZBT were one group who went mountain hunting. They tried sites at Mannington mill, 83 miles south of Perth, and Burbury, 118 miles south of Perth. Quite a good signal was heard at my QTH from both locations. Bill 6ZBZ has re-appeared on this band with a re-built tx using an 832A in the final. Glad to see you on again Bill. Mid-week activity lately is very slack, apparently the cold weather 144 Mc.

144 Mc.: Dennis 6AW and Brian 6ZDE ran the June Fox Hunt. They found a small cave in a limestone cliff right on the river's edge near Fremantle. The signal had the appearance of coming from way out. The tone could be heard when 30 yards away the tone could not be picked up on a snoop loop. Tony 6ZDZ and myself as co-pilot were the first of the only two teams to find the tx. Lance 6LR and Glen were 2nd.

A solid core of 144 Mc. mobiles is being established and rather far reaching plans are afoot to increase these numbers. Narrow band f.m. is being considered as a likely standard for VK6 and availability and adaptability of t.v. components is being studied.

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VICTORIA

426 Mc.: A proposed Gentlemen's Agreement for the frequency use of this band has been submitted to the G.A. by a group who worked in conjunction with several other Amateurs. The band has been divided into six segments, namely:

420 - 434.5 Mc.—Modulated oscillators.
424.5 - 431.5 Mc.—Amateur T.V.
431.5 - 434.5 Mc.—Amateur F.M.
432 - 436 Mc.—Xtal locked operation.
436 - 443 Mc.—Modulated oscillators.
443 - 450 Mc.—Amateur T.V.

These divisions may at first seem unnecessary, but they have been the product of some far sighted chaps thinking.

The two lowest bands have been chosen to border the lower edge of the two tv. bands as at this frequency the unwanted sideband will be extremely difficult to suppress and minimize interference is planned.

The two tv. bands will enable simultaneous two-way tv. contact and this is not too far in the future.

The xtal locked segment is chosen as 144 Mc. can be tripled into this part of the band and is the natural choice for this type of equipment.

We at VK3 have these suggested segments will be acceptable to all States as a Gentleman's Agreement. If they are, they could become an official W.I.A. Federal policy. Please let us know the views of other Groups on this matter. The frequency bands have been worked out before too much equipment is constructed. A firm sound policy to this band will enable exchange of ideas from State to State and any v.h.f. Amateur changing his QTH interested in this gear will not be landed with useless gear.

I cannot stress the urgency of this matter too much as 1944 will be much too late to decide what we are going to do and where we are going to do it. 73, 6ZDM.

TASMANIA

The 50 meg. converter mentioned last month will be completed by the time this goes to press. The subject of lectures was brought up and it was decided that each member should take it in turn to describe his gear, so that everyone can get some ideas on improving their equipment. The lectures will be carried out before too much equipment is constructed. A firm sound policy to this band will enable exchange of ideas from State to State and any v.h.f. Amateur changing his QTH interested in this gear will not be landed with useless gear.

6 Mc.: At the time of writing, no DX reported on this band. The usual gang is active with the exception of TZAV, whose power tranny went up in smoke for no apparent reason.

144 Mc.: Activity is still high and getting better all the time. Reg and Wilt, TZAV and TZAQ are re-building the final in the rig to improve its efficiency. Parallel lines are to be used as the tuned circuit and a blower is to be installed to keep the old 6/40 cool. TZAV.

Some news from 7LZ: TBQ and self are only active stations around here on 50 Mc. and we

only use it around Ross Hull times—have to be very careful with t.v.

On 144 Mc. a different story. At present there are 12 active stations around Launceston and another boy is awaiting his Z call. Some are only using low power, but the rx standard is good and beams range from 4 to 10 elements. When TZAV and self were operating from Flinders Is. last Aug. 8 of 12 had consistent contacts up to 103 miles, so it's not too bad. 7LZ, TPF, TBQ, TDK, TZBR and TZRF are all at Launceston. TZEC at Evandale, 12 miles from Launceston, has a 10 element Barrow, 4,000 ft. up; 7ZP, TZBB, Portina, approx. 20 miles s.w. of Launceston, 1,000 ft. up; TZBB is awaiting his full call. TZEC works into Hobart any time and is quite handy as a liaison when the band opens to VK3. At present I am unable to give frequencies as some changing around is going on and will give a list later.

TBQ has almost completed his high power 144 gear and is due on any day. TZBB is active on 144 from Ulverstone and is in Launceston on week-ends with mobile gear.

PAPUA

Very little v.h.f. news to report once again this month. 50/144 Mc., no DX was heard during Aug. 49.8 and 49.9 Mc. long-distance scatter stations were heard on 144 Mc. during the month. T.V. TNQ7 Townsville added a little variety to the rather sparse v.h.f. scene, reception being noted on 2nd, 3rd, 4th, 16th, 27th and 28th June. 9CK is a newcomer on 144 Mc. Murray has just completed a converter for this band. 73, 6ZAU.



CALL BOOK MAGAZINES

The Federal Treasurer of the W.I.A. again has for sale £1 a set paid a few back numbers. The "Call Book Magazine" is the American directory of Amateurs. These have been used by W.I.A. Federal Officers and are in first-class condition.

There are two editions: (1) United States only, (2) "Foreign" edition, that is to say all Amateurs except Americans.

Apply to Bob Boase, VK2NI, 50 Cardigan St., Carlton, Vic.

TECHNICAL ARTICLES

Readers are requested to submit articles for publication in "A.R." in particular constructional articles, photographs of stations and gear, together with articles suitable for beginners, are required.

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57 Gardenia Street, Blackburn, Victoria

ADDRESS CORRESPONDENCE FOR THIS PAGE DIRECT TO THE SUB EDITOR

Hi there fellow twisters, here we are again with you. With the advent of that cold winter days, it does not inspire one to go out to the shack. That is if your shack is not in the house. So it may afford you the opportunity of getting your equipment ready for the coming R.D. Contest. While on the subject of the R.D. Contest, make sure that you are quite conversant with the rules. There will be a few newcomers to the Contest this year and we will have to see that you have not been disqualified because you did not read the rules properly. Best of luck to all of you in the Contest. Now what State is going to challenge VK3 this year?

As your sub editor I am on holidays during the last portion of August. I would appreciate it if you could let me have all correspondence by 16th of August. Any letters received after that date will have to be held over until the following month.

How about the "Voice of America's Radio Amateur's Note Book"? This session can be heard every Sunday at 6.45 p.m. E.A.S.T. Sorry I can't give you the exact frequency, but have found that their transmission is at 31 m. and it is the same for the present time. Many interesting interviews and talks can be heard on this programme, which is conducted by Bill Leonard, W2SKE.

Several years ago a Contest for S.W.L.'s in VK was held and the results were as follows: F.E., all S.W.L. Groups were circumscribed on the details, but to the best of my knowledge not one Group notified us on what they thought about it. And until such time as more interest is shown by me members, we will certainly not waste our time and effort on such projects. I know that we have more S.W.L.'s in VK than is generally known, and it is from you silent types that we want to hear, as well as the freq regulars. So how about it chaps, let see if we can't all make the S.W.L. Groups into something really worthwhile.

All DXers will be interested to learn that there will soon be activity from ZD8 on s.s.b. by 7th August. There is also a good chance that ZD7SE will also be on the air. G3PEU will be on St. Helena for some two years, so don't despair if you can't hear him at first.

VICTORIA

Several years ago we submitted two awards to Council. They were the DXCC award for confirmation on having confirmed 100 countries, and the Heard All VK award. However, we would like to see if the award certificates are on hand at the present time.

At the last meeting of the Group, an illustrated tape lecture was presented. This lecture proved very popular with the members. The tape was made available by courtesy of the VK2 Division. There were 22 members at the meeting, and our President Maurie also gave a short talk on s.s.b.

Noel L3101 has been unable to pay any attention to the bands for some time due to eye trouble. We hope that you send us news of your news Noel, and do hope that you will soon enjoy better health and will be able to again soon take an active part in our hobby. Recently Noel received a certificate from "Programme Services".

Richard Mills, of New York, is very keen to become a member of the W.I.A. He has already made moves to join. Well Richard, you will be most welcome to this page.

Richard has constructed himself a grid dip oscillator and has been having fun and games getting his v.h.f. converters on the nose. But he has found that he is not getting enough injection from the 144 Mc. oscillator and the result he has had to make a few modifications. Here you don't end up on 72 Mc. Ron, but with that g.d. you should be OK.

Maurie L3035 has been very busy with studies and home chores of late. With the addition of a new domestic (L.C.) filter he has been able to find very little time to chase DX. Your scribe has the odd listen on the bands and recently erected a 21 Mc. dipole but has found that it was no better than the 14 Mc. dipole. Grahame L3138 has had a plenty of fun on his recently erected rotatable dipole. Bad luck the photo was not so good, Grahame better have another try some time. Had a phone call from Michael L3123 a while back. Michael is using a No. 11 rx at the moment as he

loaned his other rx to his YL, whom we hope may become an active S.W.L. Mike is on the look out for a 14 Mc. converter.

There are several cards in at the QSL Bureau for L3035 and L3141, if those members would be kind enough to forward a stamp addressed envelope to the QSL Manager (Eric Treblelock) your QSLs will be sent on to you. There is also a card for a non-member whose surname is Mackenzie.

For the month of May, I received 10 QSL cards during

the month of May, but bemoans the fact that there were not many new ones amongst them. Well Eric, I am sure that most of us would fall over if we ever received that many in a month. At present Eric has been receiving conditions on 160 metres. Like most of us Eric is looking forward to the R.D. Contest and he strongly urges you to make sure that you get your logs in early.

NEW SOUTH WALES

Chas. L2211 has not been very active of recent weeks due to a number of reasons, and at the moment he is having a rest from S.W.L'ing. But no doubt Chas will be back into things when we get into the winter months. Don L2221 at the moment spending some leave up in VK4. Have a good holiday old son, and no doubt the rest from radio will also do you a power of good.

WESTERN AUSTRALIA

Our good friend, Peter L6221 has been busy on the bands as usual, and he is rapidly rising on the DX Ladder. This month Peter has

spent more time on 14 Mc. That's a change for you, not a bad band is it? Recently he erected a 7 Mc. folded dipole and has found an improvement. Peter mentions that 7 Mc. has been very good to W land on morning QSO's. He has been getting numerous Q and ZE s.s.b. Wish you would pass a few over this way, we do hear some of them. Peter still listens to many of the novices in W land. Thanks for your interesting letter, Peter, and good luck in the R.D. Contest.

GENERAL

Most of the Groups seem to be rather inactive. How about you all proving me wrong? The R.D. always gives us an indication of the activity, although we are aware that there are many "I.W.'s" that are not interested in the news.

We would like to provide you with more news, but that is up to you to provide the news. See you in the "R.D." 73, Mac.

DX LADDER

| | Countries | Zns | S.s.b. | W |
|---------------|-----------|-------|--------|-------|
| Conf. | Hrd. | Conf. | Hrd. | Conf. |
| E. Treblelock | 281 | 239 | 40 | — |
| D. Coggan | 113 | 239 | 38 | 26 |
| A. Westcott | 119 | 119 | 11 | 9 |
| H. Hilliard | 76 | 229 | 33 | 24 |
| M. Cox | 72 | 223 | 29 | 150 |
| P. Drew | 62 | 199 | 27 | 117 |
| N. Harrison | 44 | 119 | 29 | 4 |
| I. Thomas | 41 | 199 | 20 | 97 |
| G. Earl | 10 | 108 | 8 | 2 |
| D. Coggan | 10 | 92 | 7 | 3 |
| | | | 60 | 14 |

YOUTH RADIO CLUBS

With a sigh, I must report that, as far as I can find out, Port Pirie is still the civilised capital of South Australia—it has an Amateur Radio with a conscience and its youth citizens and it is a good thought about the future of Amateur Radio. For the sake of anybody outside my usual circle of readers (all four of them!) who stumbles on this section by accident, I will state the facts concerning Port Pirie.

The Y.R.C. scheme has two obvious points at least—it must do a great deal of good for the youth of this country (are you sure we won't get the wave of juvenile delinquency from other countries?) and it must help in the position of Amateur Radio much stronger in the quickest way. Federal Executive backs this viewpoint. To all Divisions, except VK5, this makes them strong, and, despite the volume of nature of our administration, the Y.R.C. has been found to be Co-ordinator in all other Divisions and the Divisions have given some backing on the lines I recently summarised.

For instance, with solid backing in VK2, over 40 F.R.C.'s are active in N.S.W. and the numbers are increasing. We are looking forward to hope that at least one public-spirited Amateur with just a little time and some interest in Youth can be found in Adelaide to co-ordinate these activities in that State. The few strong Club Leaders in the Divisional help them need, and encourage potential Club Leaders who see the present handicaps. If one Co-ordinator is not there, why not a committee?

A forecast last month to my aforesaid four readers, I'd like to try an experiment—a daring one in these days when everyone expects 64,000 Royals for answering any question or writing 25 words of slog about someone's sex life. That is, to design and construct a portable exhibition unit to take to schools, fetes, shows, exhibitions, etc., for the purpose of interesting young visitors and creating good public relations in general. I propose a committee of our own to do this as a principle. Would anybody be interested to design an arrangement of display units of literature, constructional work, Amateur station, intriguing demonstrations, etc., for the above purpose? The complete article should be available in two or three cuts at the most. I'll be only too happy to assist you, I can, but I suggest an article, finally, in "A.R." by the designer.

News is still very scarce from VK4 and VK6. How about it? I have heard of one

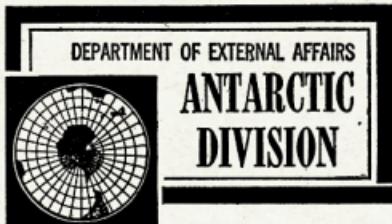
half-witted Headmaster in Queensland who brushed off the Y.R.C. idea, but I can assure you his type is not common. All high schools are fertile fields.

Did you VK5s see "The Age" of June 67 Y.R.C. news? It was a good article by the leaders of Eighth Footscray, Scott Troop at their transmitter, J.A.E.P., Scout Master Les Marrie and brother John have both been through Canberra recently and were good enough to call on me and were good enough to bring a copy of the news direct from Footscray. Bill BAHT is a recent operator and instructor, and Bert S2GD lent the gear. Amongst other things, they have been most ingenious. They have two neighbouring Mayors of Sunshine and Footscray as patrons.

Recent additions in N.S.W. are Hurstville Technical High School and Cronulla High School (both in Sydney, in case you can't find them on a road map). I am looking forward to getting some more news from Hurstville T.C. Secretary, but Brian Burton (ex-IRK, now 2AUH) writes from Canberra. The Y.R.C. has been a great idea to me for a long time, and I am keen for me to start a Y.R.C. I have already had my first meeting and we are on the way. About 60 boys wanted to join, but we cut it down to 20 for a start. We are working in a school now, new members, blind and working soon apply for a license. This sounds great stuff, Brian, I know you'll enjoy it, and I hope all the other G.P.S. becomes envious. You can show them what they are missing!

Here in Canberra, the word still spreads. The fanatics from Lyneham High, led by George G1H, are now in the Boys' Boys' Club to publicise the start of a new radio course there under Mr. V. Sabanski. The "Canberra Times," like any other newspaper, respects our new value and printed a report on our new venture. You club leaders should remember that all publicity helps—as long as you're on the right side of it. In addition, a new group met at Dickson High and should be active soon. That makes three groups in the area. The Canberra and Canberra Radio Society are doing something. One anxious group of 20 is stranded at Narrabundah High without a leader. I'm hoping they'll be the fourth high school some day soon.

P.S. For P.S.—Please don't have so many of your flock counted twice or three times. Surely you couldn't have 120 at a meeting in the City of Churches and then nothing happens about Youth Radio Clubs! 73, IRK.



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FEDERAL AND DIVISIONAL MONTHLY NEWS REPORTS

(SEND CORRESPONDENCE DIRECT TO DIVISIONAL REPORTER NAMED AT PARA. END)

FEDERAL

F.E. MEETING, 8/7/63

General Business: Two members brought the matter of the possession of a heterodyne frequency meter as a condition of issuance of a full licence to the attention of the meeting, and as a result discussions it was decided to determine exactly what equipment apart from a heterodyne meter was acceptable, it being pointed out in discussion that some approved types of wavemeters are inferior in accuracy to models apparently unacceptable to the Department.

It was reported that the draft minutes of the Federal Convention were now complete and would be distributed as soon as possible. It was also reported that due to difficulties with the Indian Government regulations, it had proved very difficult to get the necessary valves selected for Indian Amateurs. It was decided to approach the problem again, the period of elapsed time being considerable.

Executive viewed with concern the deletion of Federal matter from the published notes. It was pointed out that the publishing of a *PROGRESS* of F.E. minutes was the subject of direction by Federal Council at the last Convention. It was directed that the Editor of "A.R." be consulted on the matter.

Other matters of importance were discussed, but unfortunately, due to their presently confidential nature, details cannot be disclosed at this time.

VK1WIA BROADCASTS

It is intended that regular broadcasts from this station should commence within a month. It is intended that the transmissions should include items of a nature similar to those broadcast by S.A. Bureau, Federal News, High Speed Morse Transmissions, Technical Lectures, and any other material having a national interest.

It is also proposed that the station will be open for normal contacts whereby members can receive direct contact with Federal Executive, as well as being employed in regular communication with members of Federal Council.

CHRISTMAS ISLAND RADIO CLUB

The following letter was recently received from the Secretary of the C.I.R.C., and was considered to be of such interest as to be worth publishing in full, as follows:

Secretary, W.I.A.

We of Christmas Island, Indian Ocean, consider 6th May to be an important date for all Islanders interested in Amateur Radio as it marks the inauguration of the Christmas Island Amateur Radio Club. A copy of our constitution is enclosed herewith.

You will be interested to hear that we already have approx. 40 enthusiastic members of all races, Indian, Chinese, Malay and European and that the traditional spirit of Amateur Radio prevails.

The Club has been prompted by Don Reed, VK9DR, who now holds the post of Publicity Officer in our Club. Don is a member of the VK4 Division. Don has been in correspondence with Ron Blaik, VK4KA, who has received from the Youth Radio Clubs of Australia. He has also received much assistance from the VK4 Division through Peter Brown, VK4PJ (Hon. Sec.), and from Ken Long, VK4VM. Alan Shewring, VK4SS, has written to us for DX news.

Our Committee has decided to adopt the Youth Radio Clubs progressive examination grading system, namely, elementary, junior, senior and master, and have asked VK3YA to arrange despatch of the first batch of certificates. We are awaiting instruction papers promised by the VK4 Division and hope to receive these shortly to assist our lecturers.

Applications can be made with W.I.A. as per constitution and we would be pleased to receive information and the necessary documents to enable this matter to be finalised. Individual members will be encouraged to join the W.I.A. Please send application forms.

Proportionately, the members of the British Phosphate Commissioners we have the use of a very fine Ham Radio shack, complete with lecture room, operating room and workshop.

We have all instructional facilities including a recorder and an epidioscope.

We would very much appreciate receiving any instructional tape available (these can be dubbed and returned promptly). Also any back copies of "A.R.", "R. & H.", "CQ", "QST", "Handbooks", etc. for our library.

Usable junk, surplus disposals, gear of any type and despatched to the W.I.A. member may care to send to the Club would help us immensely as there is practically nothing available on the Island. The B.P.C. will send any items freight free to Christmas Island if delivered by air. We are receiving despatch in each State. Shipping contact, however, is more regular from Melbourne and Fremantle.

Our lads are very keen and we trust that the Club's efforts will be the means of guiding many an Asian lad into a useful electronic occupation apart from his interest in Ham Radio.

QSL Officer, Ron Ashley, will see that QSL is 100 per cent through the Bureaux. Although VK9DR is the only licensed Amateur on our roll at present, it is probable that we will have more active members in the future.

Appropriate publicity in "A.R." would be appreciated and we trust that QSL cards from Christmas Island will appear shortly in many a DX hounds' shack.

(Sgd.) T. L. Menon, Hon. Secretary

FEDERAL QSL BUREAU

As from 28th June the new address of the A.R.R.L. is 228 Main Street, Newington 11, Conn., U.S.A.

The 1963 7 Mc. DX Contest is to be held on Oct. 19/20 and Nov. 2/3, 1963, the times being 0001 G.M.T. to 2359 G.M.T. in the second period for c.w. The Contest is between 40 and 10000 KHz. and overseas stations only. Further details from this Bureau and logs to be sent to R.S.G.B. not later than 25th November.

The R.S.G.B. staged its Golden Jubilee celebration on 1st June and with great success.

The DXpedition to PY4 (Trinidad) due to have been in operation in July, did not take place. Trinidad is a military installation of the Brazilian Government and PY4AS could not obtain permission to work from that location.

Claim forms for the Okinawa Awards sponsored by the KRS Radio Club may be obtained from this Bureau.

Due to increasing costs, the Radio Sports Federation of the U.S.S.R. has announced the following changes for its Awards: R150S, R1600 and W160U Awards—14 I.R.C., R151R, R16R, R6K and Kosmo Award—10 I.R.C. All applications to Sec. 88, Moscow, USSR.

Philippine Amateurs have formed a society called the Philippine Amateur Radio League (P.A.R.L.) with address at 67 Espina Extension Street, Quezon City, Philippines. The QSL Bureau address is the same as above.

The R.S.G.B. advises that it has no connection with a body called the Radio Club of Scotland and all cards for GM should continue to be sent through the R.S.G.B. Bureau, Bromley, Kent, England.

— Ray Jones, VK3RJ, Manager.

NEW SOUTH WALES

HUNTER BRANCH

The last notes did not include a report of the June meeting of the Branch, so both June and July meetings will be reported this month. At the June meeting, the President, Lee 2RJ, was laid up with the "flu" and yours truly took the chair. Because of this, the business and the technical meetings were well short and the rest of the available time was taken by the lecturers. Neil 2ZCU chose as his subject "Audio for Your Transmitter" and after displaying a particularly neat piece of equipment, described how it was possible to compensate for various audio source deficiencies and put out a clean audio signal. Ian 2ZLF then described his audio signal method of modulation, enabling 100W. to be run mobile to a 6/40.

Again a well built sample of gear was shown and both lectures are to be complimented on the thorough treatment of the subject and the well made rigs.

At the July meeting there were again two lecturers who spoke about the design and conversion of the radiophone to 1x-2x units for use on the many ships responsible to Wayne Murray and Bill ZCZV. Again these were very practical talks and each lecturer was able to answer questions about the finer points of the design bits. Then began a film show. VK2APZ supplied the first film presented in room 18. Yes, that's fifty—a remarkable roll-up again. The first two films were pretty routine technical stuff presented in a non-technical way and the third film was a cartoon. This was run through the projector and followed evening and following a vote of thanks moved by Chris 2PZ, we all clapped loudly and went home.

Probably the most remarkable piece of news this month concerns Frank 2NC who was actually heard on the air! As it was in reply to the Monday broadcast, we hope that Frank will continue to call and even shame some of those other seldom-heard calls to come on as well. Leo 2OB is a regular attendee at the meetings, but he has been absent from time to time, preventing the r.f. from getting started, care will still be true, so what about it Leo and Harold and Harry and lots more—let's hear you!

Jim 2AHT has the new exciter for s.s.b. so I am told and works everyone with the greatest of ease, even though one of the reflectors fell off, on the beam. Jim says "It's all that 'windy weather," says Jim. "It's all that r.f.," says we. The apparent uselessness of 40 as a band for local contacts at night has caused Bill 2XT to go on 80 mobile, and even without a proper whip, the antenna is heard. 2AYL is also busy with a mobile gear, but no electronics are involved—it's the Jaguar.

Quite a lot of thought of late has been given to Amateur t.v. and among those known to be interested are David 2ZXA, Rodney 2CN and Les 2RJ. The main interest is in a transistorized receiver in my workshop, but Les at least is attending the Tech. to learn some more.

Because of the Jaguar, Stan has enlisted the aid of Mac 2ZMO with the QSL Bureau. This Mac does a remarkable time as he's been converting 32s or letting off crackers. Stuart 2AYF is busy with some s.s.b. gear, nevertheless should be putting out his d.c. bands signal soon. Varley 2SF is active on 7 mcs. and has a solid signal on that band.

One of these nights soon we'll have some of the boy gang lecturing at the meeting on "Following" being the programme "On Forty—Quick," by Sherwood, "My All-Band Fence," by Bruce Morley; "DX-pedition to Stockton," by Les Payne, and "How to Copy 80 Metres with No Antenna," by an anonymous Master with a degree.

In the far wastes of Wallsend or Cardiff, or wherever it is, John 2ZG has found enough time between night service calls to build a new shack so that he can get on high power and work some 144. Dan 2X-R has come to R.S.P.C.A.'s establishment. Also among the DX is Tony 2ZCT since he put up the new beam and Des 2ZDN is having particular success with the mobile on 2 mcs. Kev 2ZKX runs a crystal converter on 7 mcs. and 2ZWM cured the modulation troubles on the Minitrain. Len 2ZPD and Charlie, whose call I cannot remember, are both busy and should soon be on 144. Ernie 2FP may have success sooner than he expected as 23 Mc has been suggested as the cross-town band in G land and there's no reason why it should not be the same here.

So that's about it for another month, but you won't forget to be at the Hunter Branch meeting on Friday, 2nd August, will you? It will be at the University College and in response to popular demand will be another "Do It Yourself" night with members displaying and describing their own gear. This is a warmup for the October meeting which will be similar with lectures for the first half and then keep us with the latest news. Listen to VK2AWX on Mondays at 7 p.m. E.S.T. for the Hunter Branch Broadcast, and please call in, whether on a.m., s.s.b., or c.w. 73, 2AKX.

lobbying campaign around Shepparton, 15 active and dormant Amateurs have agreed to meet on 12th July to discuss further the possible formation of a Y.R.C. With this number of potential adult instructors, we anticipate evolving a roster of three per club meet, meaning only one meeting per month per head.

Some of the zone notes contain a smattering of good-natured banter (refer digits at 5P5, for example) and this makes easy the digestion of normally stereotype reporting. Arthur (not of M.A.D. fame) informs me that my comments re Kinnear Trophy damage, caused consternation amongst the previous holders. If my feeble efforts to emulate the aged experts were unsuccessful, I beg forgiveness.

SOUTH WESTERN ZONE

Gordon SAGV of Colac, has had a two-way QSO with Bill JXE of Hexham on 144 Mc. Bill SWK of Wangoom has been working on modulator. John JHW and Steve SSE are to be present at the meeting of the VHF Club from the States. Ted IPS is back on the job again and known for his c.w. John JAGD came on recently on Thursday night's meeting, on what was coming on Thursday nights. SNA is back on after a long silence.

Harry JXN hopes to go portable and mobile to the next meeting and have a car open. Norm EQZ hopes to be back on the air shortly, maybe on 40 m. Bill SWK is the specialist on concrete foundations and masts. Steve SSE and JASZL, hope to be in action from now on with Scout Jamboree of the Air later in year. Also JXN is hopeful of going portable to the local Scout camp when the Jamboree is held in Eynesbury.

MOORABBIN & DISTRICT RADIO CLUB

Activities for the Club this last month have been such as to leave members a trifle exhausted. On Friday, 5th July, we held an auction night, where bargains galore were obtained. Many of our younger members were seen after the sale carrying off their goodies. The July monthly meeting was followed by a W.I.A. taped lecture on balloons. The tape, together with accompanying slides, provided

On Saturday, 27th July, members of the Club were treated to a most enjoyable social evening held at the home of Wally ZAAK. The OM's XYLs got together, had a good old session too. Don't blame them either. Blimby, you should hear the way the OM's carry on about the XE8s, etc. that got away. Drive any gal fair up the wall.

John VK3PN who has received his certificate for the last Ross Hull, being top scorer in VKA. Congrats. are also in order for Andy ZAAK who has just received his certificate for the last Ross Hull, being top scorer in VKA. Congrats. John will soon be up on 2 mhz with a complete "home-brew" station. Jolly good show Andy.

Noticed that Harold 3AFQ is now on 160 mxx with carrier control, running 35w. to a base loaded quarter wave vertical. He also has his 2 mx clover-leaf strung up under the rafters in his shack and can "work" on the 160 band running 100w. to 522. What happened to "Home Brew" Harold? Lindsay 3ZNS has re-appeared on 2 mxx, apparently having temporarily recovered from his attack of YLL. How long for Lins? And fancy, a 6 mxx converter!

The club is considering starting a net on 2 mxa somewhere above 145 Mc. Maybe this is the reason for the rumours about Peters 3XX and SAPD coming on to the band soon. Ken 3ACS seems to be getting a lot of fun out of being control station. Three times in a row; wonderful!

V.h.f. members have been active in the s.h.f. bands doing some very interesting experiments. Ken, W6KZ, has Peter, ZS2PF, already preparing for a 2 m. DX-pedition to VK4 in the coming holidays. Have fun Peter. David ZSOP is busily constructing a high power final for his Channel O t.v.l. producer. Yours truly (Bob) is again active on 2 m. after an absence of some weeks due to my mother's death. Zer, ZS2R, is radiating "Dipole" A.M. SLC also to be heard on 2 m. after many months of absence. Welcome back A.M.

Don't forget the mid-year natter party to be held on 2nd August and also bear in mind

the next general meeting on the 16th. Information regarding Club activities can be obtained from Harold (our Secretary you know) 3AFQ, 73, 3ZRD.

QUEENSLAND
TOWNSVILLE AND DISTRICT

I must thank Bert 4LB for sending in the last month's notes for me as I was flat on my back in hospital, recovering from the operation. Glad to report that I am almost 100 percent again and will be back again at work

long ere these notes are read.

Conditions still are waning with the result that the locals are not on the bands very much. That makes it very hard to find news to keep the notes going. Sorry to report that Claude 4LIX is going to relinquish the sub-editorship

4UX is going to relinquish the sub-editorship for the VK4 Division. It seems that the Sunshine State finds it very hard to interest any one in performing this task. No doubt each one has found it hard to get the doings on what the boys are doing as all the correspondents seem to fall by the wayside as the enthusiasm wanes after a while.

It seems that at long last the years have caught up with our old friend, Arthur 4FE. He what retires at the end of August for what reason and when he last had any information, early in September for a spot of leave before taking up residence in the big smoke. Now Arthur will be able to do all that DXing he wants to do. Ted 4EJ surprised the gang the other night as he went QRT for the evening. He had been working the AYL calls. He must have seen the light at last. What did the Elmer Daze box say?

Bert 4LB is having strife with the tx, cannot hold the final current to the stipulated levels as the circuit says. Charlie 4BQ still holds the fort at the Rockhampton Section; he has a special grant. I have had a copy them. Allen 4BE and John 4DD still pop up on the bands to exchange reports on the doings of the band. Since the bottom fell out of the thermometer during last week, the noise level has been high. I am sure that the new 40m band and snow signals can override radios. No news from the Cairns boys so had better pay them a visit again and find out why no reports. Don't forget you locals, the Scouts promise to run up this year for the Jamboree. Forget what happened last year and help out this time. 73, B.P.W.

WIDE BAY AND BURNETT BRANCH
Frank 4FN, of the Central Qid. Branch, passed through our territory recently, driving his 45 Holden like Father Neptune on a visit up to the city, and a little later as he journeyed home in triumph, one of the enemy drove past him in great haste in his chariot and flung a thunderbolt at him, and so Frank drove home the rest of the way without a windscreen and cold ears.

I don't know just what the trouble is, whether it is the old man with the scythe catching up or if he is trying to economize, but Gordon 4GH has been heard—old I say, heard on the a. m. band, having committed suicide on the modulator tap. Never mind Gordon, make out a list, pin it on the wall and tick off the items as you go through. You know, (i) have I switched on the heaters, (ii) the h.t., (iii) the modulator, (iv) aerial to transmit position, etc.

Jimmy 4HZ is busy bedding down his bees for the winter. An idea like "How nice a little soft symphony each hive like the Lullaby of the Bees," to keep them happy and contented over the cold dull winter months. A little later on when the birds appear, again play them "Spring Song" with gusto to urge them to be up and at it. But apart from his bees, Jimmy is giving consideration to planting a few more trees, and he added, "I have the power when I raise the news rig on the air. He recently paid a visit to Herb 4KM of Mundubbera. I wonder what they talked about?"

The Bundaberg class is making good progress. They even have a "Gentleman of the Cloth" taking his regular dose of ergs. Some of the boys there are still waiting for their call signs, while others have theirs allocated. Bill Sebbens is 4ZWS, Roy Spotswood is 4ZWR and with 4ZWH already operating, the boys will be thinking they are working America with all the "W" call signs.

Bought a copy of "Woman's Day," 17th June. I think it was, and saw a write up and some pictures on Rusty 44M and Joslyn 44J, telling the world all about the Ham activities. The "Bundesliga" Cup is being played. City Council for the use of the East Bundesliga water tower (i.e. the rooms under the tower) as their club rooms. If the rig runs hot, it should not be too much trouble to install water tanks or at least a pump pointed out the water tower. It is not intended to be used as a "junk circuit." — Fred COX.

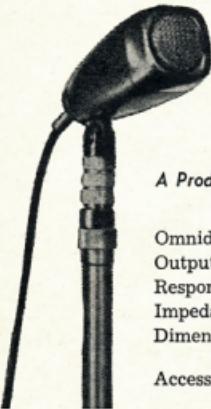


ADJUSTING THE WHIP

S.W.L. Bill Wines (right), of Warrnambool, is seen making adjustments to the whip aerial on the rear of his car while Stuart VK5MS, of Mount Gambier, looks on. Both members attended the South Western Zone Convention. (Block courtesy of "Warrnambool Standard")



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WESTERN AUSTRALIA

Before I go any further, don't forget the R.D. Contest. Tune up that rx, fix that tx, get a little enthusiastic and land him in the middle of it. Remember what the day is for, that is, to commemorate the memory of those Hams who paid the supreme sacrifice in world conflict.

I know one bloke who is going to be in the Contest and that's Bill 6DD. Bill is situated at the town of Kalgoorlie. Loud and clear signals from 6KG's site have been heard. Mmm, well, no, Bill has two tx's, we were at 6KG, and operates 6DD. So that's what I was saying, loud and clear sigs on 80 have been heard and Bill is expected to do great things during the Contest. Don't suppose you could move 4' or 5 hundred miles east, Bill, for the Contest? You'd be in W.A. in no time and close, like, to those perishing Eastern States.

I believe the Wireless Bird has been busy over recent months and chirpings and burpings have been heard from the QTHs of Wally 6ZAA and Neil 6ZDK, who, of recent date, have been providing a harmonic each. Our best wishes to all and may the better baby wind, Burp! owl sorry!

Whilst Wireless Birds are not really animals, I believe there was a real fox hunt recently. Yes, the fox was Dennis 6AW and he was holed up in the cliffs of Moosman, real cool like man with a tx and rx on his head, always putting out a better signal on the Canning side of the river than it was on the Stirling. And do you think this caused some fun! Anyway, he was found by Tony 6ZDT and Alyn 6ZDM. Alyn was the one who found him shortly and I can tell you any more about this because if I do and Alyn finds out, he'll say me he will, because he wants to put it in the v.h.f. notes and if you want to know any more, you look there. See!

An interesting lecture was presented on the "Radio Amateur at a recent meeting. This had been suggested by Max 6MM at a Council meeting a little while ago. Now those poor little electrons get kicked about is terrible to behold. I wonder if W.A. people appreciate how lucky they are to have a fine radio amateur who is being done along these lines. You know, x-rays and deep ray treatment and so on. Mmm? Sorry, I got a bit philosophical there, but it sort of makes you think, don't it.

There's one to make you think. How many apples in a bunch of grapes. No, no, that's not it. Ian 6CL has a new diesel plant, see. Now this is rated at 3.6 kw, not 3.6 kva, but kw's (so I've been told). The question is, why is it that the tone of the diesel changes when Ian turns on his plant? I mean on just a kettle of irons and winders with no effect, and it's only when the rx/tx is over the tx side that this low growling, labouring, puffing, thumping noise issue forth. Very odd. Anyway, good luck Ian, a machine like that must contribute add to the cost of living away from the city. Er! Um! I'm not sure that sounds correct, but all the best.

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My spies down Katanning way are not very active at the moment, but the last time heard, Clarrie 6XG was all points East, I.R.E. Convention, etc. Should be back by the time you read this.

Now don't forget! R.D. Contest, 17th and 18th August.

TASMANIA

There are many very interesting things to report on the month, but perhaps the most interesting from the point of view of our hobby are the disappearance from 7 megacycles of most of the intruding commercial stations, and the licensing of Amateurs by Red China. We have only heard the stations with the prefix BY on c.w. and talking only amongst themselves, but even this is a great step forward.

Another piece of exciting news is the acceptance into membership of eight new members of the W.L.A. Divisional Committee. All of these new members are full members. Hugh 7DS, Brian 7EP, Bob 7IL and Winston 7ZAP. We extend to all a hearty welcome, and hope you will all take an active part in Divisional work, whether it be administrative, band activity, or merely helping with the multitude of jobs to be undertaken.

The two mx boys will soon be bearing a signal from Edgar 7RY who is ready to fire-up on that band. May I remind members that the 7000 band is the 280 Mc. band. Furthermore, the 420 to 450 megacycle band is not to come into operation until 1st January, 1964. Plans are afoot, particularly in Divisional work, to have transmitters and receivers ready for that band.

Our Secretary, Charlie 7DS, had a bout of sickness about the end of June, and so did his rig. I understand there was no connection between the two events. The v.h.f. boys have just finished a 6 mx converter for use by the TWI broadcast office, re-transmitting the 7th news each Sunday morning. It is intended that Terry 7CT will be the first user of this gear, so the three officers will then be equipped to do the re-transmission. Congrats to Den 7DK on having the initiative to do this. The 7CT area is a sparsely populated area, filling in a gap in our services. We are also delighted to learn of the increasing attendance at the Zone meetings, 22 at the June Northern meeting and 20 at the July North-West meeting.

Remember chaps, the R.D. Contest is in August. We need a good score from you and make sure your logs are also entered well before the due date. We do not mind the QRM, it is a thrill to hear the VK7 stations making such a lot of noise.

Terry 7CT has just terminated, at time of writing, his lectures to the A.O.C.P. class, so they will be sitting for their exams shortly, and we wish them all success. Terry hopes to begin another class next February. The Division is very much beholden to you for your devotion to Amateur Radio, Terry, and publicly thank you for your efforts.

The 7th meeting took the form of a film evening, with emphasis on space travel and research. The films were well received. The meeting was also delighted to receive a letter from the Director of Civil Defence in Tasmania outlining our part in the future plans of his Department. Your help will be needed. 7Z, TZZ.

NORTH-WEST ZONE

Not a lot of Zone activity to report this month, everyone seems to have been very quiet lately, although it has been whispered that TDA has been heard on the air! You truly hope that our contacts will increase on 2 m, mainly with Northern Zone chaps. These boys are keen up there, with several new Z calls now operating. Unfortunately these activities are now denied me due to lack of xtal- and wheel-sets.

Unfortunate conditions seem to exist on all other bands at present, sometimes making the broadcast difficult to receive, even on 80 m, although according to George 7XL, 40 m DX with a.s.b. is in commonplace.

We have pleased see several chaps who seldom attend our meetings present last meeting, and to welcome Mr. L. E. Tong, from Devonport. Athol 7LR arrived complete with a large quantity of goods for auction, this being conducted most easily by the T.A.L. This meeting was most successful, both from a social and financial aspect. It is pleasing to see regular good attendances at meetings, but what we need to look for are ways to make Amateur Radio more interesting and appealing to the amateur, and hold the attention of both new and old members. We need more Radio in our activities, rather than just having a social club, which, excepting July, seems to have been the tendency of late. 7Z, 7ZBH.

NORTHERN ZONE

I missed out last month on the notes, though nobody's fault but my own. I was too late I will have to mend my ways.

As far as activity is concerned, this has again been mainly concentrated on v.h.f. The 7000 band has been very active. There are now 10 active operators working this band and any night can find at least seven of these working. Eric 7ZC consistently works Hobart from Evandale on sked, much to the envy of others in Launceston, but Bob 7ZP has been able to claim the Hobart boy for the last few nights. Den 7DK has been heard in Postina, 35 miles away, on his 2 mx mobile, using a quarter wave whip, which shows good promise for mobile activity.

Jack 7JF has come up with a signal on 144, as now, and the two 144' masts at Postina, 7ZBB successfully passed his c.w. for his full licence, and is waiting on his new call sign, so best of DX to you Ted on the lower bands. Bob 7ZP has cured his modulator trouble and his signal is now excellent, especially with the beam pointed to Postina. Graham 7ZBR is a consistent worker on 2 mx. He can be heard every night and Graham has his sights on working the VK3 boys as soon as the next breakthrough occurs.

Very pleasing to see all these mobile signals coming on V.H.F. They have been heard in the north and north-west areas: Den 7DK, Peter 7ZBB, Col 7LZ, John 7JF, Ken 7KH, George 7XL, Syd 7SF, Max 7MX and we should see several more on shortly. These mobile stations are all potential factors to go in an emergency. Now that the band is rolling with the commencement of a W.L.C. E.N. organisation in Tasmania, this fact may become even more important.

The monthly meeting of the W.L.A. was a very interesting one, some old faces were seen at the meeting—Rex 7TR, Bill 7M, and it was very pleasing to have them back. The subject of discussion was the revision and amendment of the Zone rules, and this developed into quite lively discussion at times—in all the enjoyable atmosphere. Rex was present also as a visitor and an Reg is associated with the local A.B.C. television station, we should see quite a lot more of him.

Den 7DK now has permission to re-broadcast the weekly TWI sessions on 2 mx and this should be a help for the v.h.f. boys in the north. Arrangements are already made for representatives to contact Jack 7JF on Saturday evenings with news for the Sunday broadcast. Jack will record this news report on tape and replay on the broadcast. 7Z, Johnny Fox.

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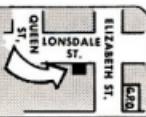
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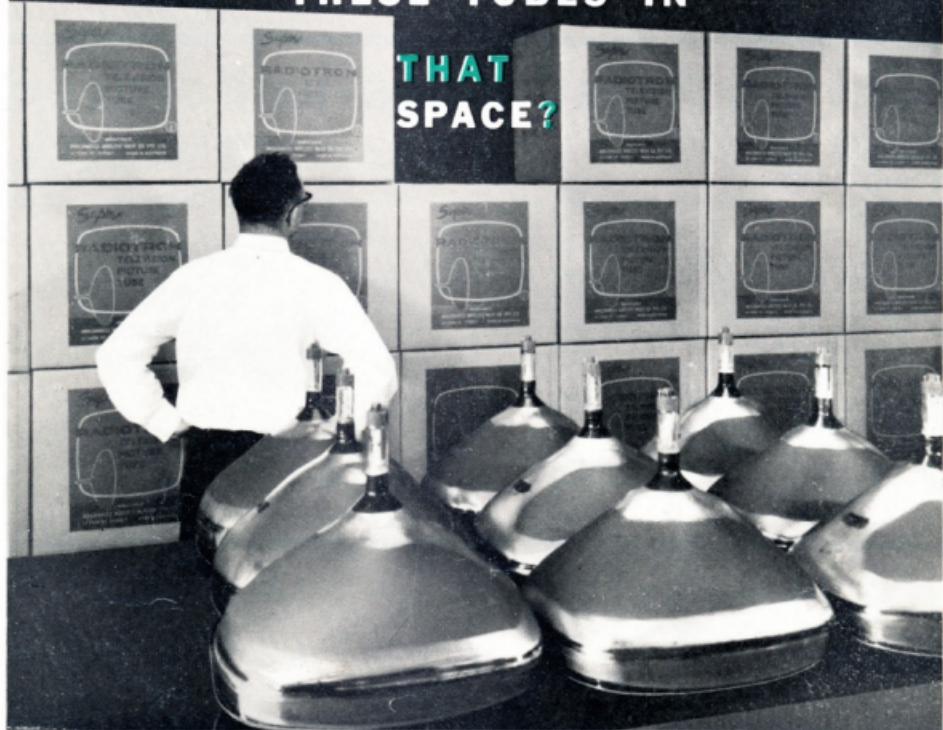


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